

LinksPlatform's Platform.RegularExpressions.Transformer Class Library

1.1 ./csharp/Platform.RegularExpressions.Transformer/FileTransformer.cs

```
1  using System;
2  using System.Collections.Generic;
3  using System.Diagnostics;
4  using System.IO;
5  using System.Runtime.CompilerServices;
6  using System.Text;
7  using System.Threading.Tasks;
8
9 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
10
11 namespace Platform.RegularExpressions.Transformer
12 {
13     /// <summary>
14     /// <para>
15     /// Represents the file transformer.
16     /// </para>
17     /// <para></para>
18     /// </summary>
19     /// <seealso cref="IFileTransformer"/>
20     public class FileTransformer : IFileTransformer
21     {
22         /// <summary>
23         /// <para>
24         /// The text transformer.
25         /// </para>
26         /// <para></para>
27         /// </summary>
28         protected readonly ITextTransformer _textTransformer;
29
30         /// <summary>
31         /// <para>
32         /// Gets or sets the source file extension value.
33         /// </para>
34         /// <para></para>
35         /// </summary>
36         public string SourceFileExtension
37         {
38             [MethodImpl(MethodImplOptions.AggressiveInlining)]
39             get;
40             [MethodImpl(MethodImplOptions.AggressiveInlining)]
41             private set;
42         }
43
44         /// <summary>
45         /// <para>
46         /// Gets or sets the target file extension value.
47         /// </para>
48         /// <para></para>
49         /// </summary>
50         public string TargetFileExtension
51         {
52             [MethodImpl(MethodImplOptions.AggressiveInlining)]
53             get;
54             [MethodImpl(MethodImplOptions.AggressiveInlining)]
55             private set;
56         }
57
58         /// <summary>
59         /// <para>
60         /// Gets the rules value.
61         /// </para>
62         /// <para></para>
63         /// </summary>
64         public IList<ISubstitutionRule> Rules
65         {
66             [MethodImpl(MethodImplOptions.AggressiveInlining)]
67             get => _textTransformer.Rules;
68         }
69
70         /// <summary>
71         /// <para>
72         /// Initializes a new <see cref="FileTransformer"/> instance.
73         /// </para>
74         /// <para></para>
75         /// </summary>
76         /// <param name="textTransformer">
77         /// <para>A text transformer.</para>
```

```

78     /// <para></para>
79     /// </param>
80     /// <param name="sourceFileExtension">
81     /// <para>A source file extension.</para>
82     /// <para></para>
83     /// </param>
84     /// <param name="targetFileExtension">
85     /// <para>A target file extension.</para>
86     /// <para></para>
87     /// </param>
88     [MethodImpl(MethodImplOptions.AggressiveInlining)]
89     public FileTransformer(ITextTransformer textTransformer, string sourceFileExtension,
90      → string targetFileExtension)
91     {
92         _textTransformer = textTransformer;
93         SourceFileExtension = sourceFileExtension;
94         TargetFileExtension = targetFileExtension;
95     }
96
97     /// <summary>
98     /// <para>
99     /// Transforms the source path.
100    /// </para>
101   /// <para></para>
102  /// </summary>
103  /// <param name="sourcePath">
104  /// <para>The source path.</para>
105  /// <para></para>
106  /// <param name="targetPath">
107  /// <para>The target path.</para>
108  /// <para></para>
109  /// <para></para>
110  /// <exception cref="NotSupportedException">
111  /// <para></para>
112  /// <para></para>
113  /// </exception>
114  [MethodImpl(MethodImplOptions.AggressiveInlining)]
115  public void Transform(string sourcePath, string targetPath)
116  {
117      var defaultPath = Path.GetFullPath(".");
118      if (string.IsNullOrEmpty(sourcePath))
119      {
120          sourcePath = defaultPath;
121      }
122      if (string.IsNullOrEmpty(targetPath))
123      {
124          targetPath = defaultPath;
125      }
126      var sourceDirectoryExists = Directory.Exists(sourcePath);
127      var sourceDirectoryPath = LooksLikeDirectoryPath(sourcePath);
128      var sourceIsDirectory = sourceDirectoryExists || sourceDirectoryPath;
129      var targetDirectoryExists = Directory.Exists(targetPath);
130      var targetDirectoryPath = LooksLikeDirectoryPath(targetPath);
131      var targetIsDirectory = targetDirectoryExists || targetDirectoryPath;
132      if (sourceIsDirectory && targetIsDirectory)
133      {
134          // Folder -> Folder
135          if (!sourceDirectoryExists)
136          {
137              return;
138          }
139          TransformFolder(sourcePath, targetPath);
140      }
141      else if (!(sourceIsDirectory || targetIsDirectory))
142      {
143          // File -> File
144          EnsureSourceFileExists(sourcePath);
145          EnsureTargetFileDirectoryExists(targetPath);
146          TransformFile(sourcePath, targetPath);
147      }
148      else if (targetIsDirectory)
149      {
150          // File -> Folder
151          EnsureSourceFileExists(sourcePath);
152          EnsureTargetDirectoryExists(targetPath, targetDirectoryExists);
153          TransformFile(sourcePath, GetTargetFileName(sourcePath, targetPath));
154      }

```

```

155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187 #if NETSTANDARD2_1
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
else
{
    // Folder -> File
    throw new NotSupportedException();
}

/// <summary>
/// <para>
/// Transforms the folder using the specified source path.
/// </para>
/// <para></para>
/// </summary>
/// <param name="sourcePath">
/// <para>The source path.</para>
/// <para></para>
/// </param>
/// <param name="targetPath">
/// <para>The target path.</para>
/// <para></para>
/// </param>
[MethodImpl(MethodImplOptions.AggressiveInlining)]
protected virtual void TransformFolder(string sourcePath, string targetPath)
{
    if (CountFilesRecursively(sourcePath, SourceFileExtension) == 0)
    {
        return;
    }
    EnsureTargetDirectoryExists(targetPath);
    var directories = Directory.GetDirectories(sourcePath);
    for (var i = 0; i < directories.Length; i++)
    {
        #if NETSTANDARD2_1
            var relativePath = Path.GetRelativePath(sourcePath, directories[i]);
        #else
            var relativePath =
                ↪ directories[i].Replace(sourcePath.TrimEnd(Path.DirectorySeparatorChar) +
                ↪ Path.DirectorySeparatorChar, "");
        #endif
            var newTargetPath = Path.Combine(targetPath, relativePath);
            TransformFolder(directories[i], newTargetPath);
        }
        var files = Directory.GetFiles(sourcePath);
        Parallel.For(0, files.Length, i =>
        {
            var file = files[i];
            if (FileExtensionMatches(file, SourceFileExtension))
            {
                TransformFile(file, GetTargetFileName(file, targetPath));
            }
        });
    }

    /// <summary>
    /// <para>
    /// Transforms the file using the specified source path.
    /// </para>
    /// <para></para>
    /// </summary>
    /// <param name="sourcePath">
    /// <para>The source path.</para>
    /// <para></para>
    /// </param>
    /// <param name="targetPath">
    /// <para>The target path.</para>
    /// <para></para>
    /// </param>
[MethodImpl(MethodImplOptions.AggressiveInlining)]
protected virtual void TransformFile(string sourcePath, string targetPath)
{
    if (File.Exists(targetPath))
    {
        var applicationPath = Process.GetCurrentProcess().MainModule.FileName;
        var targetFileLastUpdateTime = new FileInfo(targetPath).LastWriteTimeUtc;
        if (new FileInfo(sourcePath).LastWriteTimeUtc < targetFileLastUpdateTime &&
            ↪ new FileInfo(applicationPath).LastWriteTimeUtc <
            ↪ targetFileLastUpdateTime)
        {

```

```

229         return;
230     }
231 }
232 var sourceText = File.ReadAllText(sourcePath, Encoding.UTF8);
233 var targetText = _textTransformer.Transform(sourceText);
234 File.WriteAllText(targetPath, targetText, Encoding.UTF8);
235 }
236
237 /// <summary>
238 /// <para>
239 /// Gets the target file name using the specified source path.
240 /// </para>
241 /// <para></para>
242 /// </summary>
243 /// <param name="sourcePath">
244 /// <para>The source path.</para>
245 /// <para></para>
246 /// </param>
247 /// <param name="targetDirectory">
248 /// <para>The target directory.</para>
249 /// <para></para>
250 /// </param>
251 /// <returns>
252 /// <para>The string</para>
253 /// <para></para>
254 /// </returns>
255 [MethodImpl(MethodImplOptions.AggressiveInlining)]
256 protected string GetTargetFileName(string sourcePath, string targetDirectory) =>
257     → Path.ChangeExtension(Path.Combine(targetDirectory, Path.GetFileName(sourcePath)),
258     → TargetFileExtension);
259
260 /// <summary>
261 /// <para>
262 /// Counts the files recursively using the specified path.
263 /// </para>
264 /// <para></para>
265 /// </summary>
266 /// <param name="path">
267 /// <para>The path.</para>
268 /// <para></para>
269 /// </param>
270 /// <param name="extension">
271 /// <para>The extension.</para>
272 /// <para></para>
273 /// </param>
274 /// <returns>
275 /// <para>The result.</para>
276 /// <para></para>
277 /// </returns>
278 [MethodImpl(MethodImplOptions.AggressiveInlining)]
279 private static long CountFilesRecursively(string path, string extension)
280 {
281     var files = Directory.GetFiles(path);
282     var directories = Directory.GetDirectories(path);
283     var result = 0L;
284     for (var i = 0; i < directories.Length; i++)
285     {
286         result += CountFilesRecursively(directories[i], extension);
287     }
288     for (var i = 0; i < files.Length; i++)
289     {
290         if (FileExtensionMatches(files[i], extension))
291         {
292             result++;
293         }
294     }
295     return result;
296 }
297
298 /// <summary>
299 /// <para>
300 /// Determines whether file extension matches.
301 /// </para>
302 /// <para></para>
303 /// </summary>
304 /// <param name="file">
305 /// <para>The file.</para>
306 /// <para></para>

```

```
305     /// </param>
306     /// <param name="extension">
307     /// <para>The extension.</para>
308     /// <para></para>
309     /// </param>
310     /// <returns>
311     /// <para>The bool</para>
312     /// <para></para>
313     /// </returns>
314     [MethodImpl(MethodImplOptions.AggressiveInlining)]
315     private static bool FileExtensionMatches(string file, string extension) =>
316         file.EndsWith(extension, StringComparison.OrdinalIgnoreCase);
317
318     /// <summary>
319     /// <para>
320     /// Ensures the target file directory exists using the specified target path.
321     /// </para>
322     /// <para></para>
323     /// </summary>
324     /// <param name="targetPath">
325     /// <para>The target path.</para>
326     /// <para></para>
327     /// </param>
328     [MethodImpl(MethodImplOptions.AggressiveInlining)]
329     private static void EnsureTargetFileDirectoryExists(string targetPath)
330     {
331         if (!File.Exists(targetPath))
332         {
333             EnsureDirectoryIsCreated(targetPath);
334         }
335
336     /// <summary>
337     /// <para>
338     /// Ensures the target directory exists using the specified target path.
339     /// </para>
340     /// <para></para>
341     /// </summary>
342     /// <param name="targetPath">
343     /// <para>The target path.</para>
344     /// <para></para>
345     /// </param>
346     [MethodImpl(MethodImplOptions.AggressiveInlining)]
347     private static void EnsureTargetDirectoryExists(string targetPath) =>
348         EnsureTargetDirectoryExists(targetPath, Directory.Exists(targetPath));
349
350     /// <summary>
351     /// <para>
352     /// Ensures the target directory exists using the specified target path.
353     /// </para>
354     /// <para></para>
355     /// </summary>
356     /// <param name="targetPath">
357     /// <para>The target path.</para>
358     /// <para></para>
359     /// <param name="targetDirectoryExists">
360     /// <para>The target directory exists.</para>
361     /// <para></para>
362     /// </param>
363     [MethodImpl(MethodImplOptions.AggressiveInlining)]
364     private static void EnsureTargetDirectoryExists(string targetPath, bool
365         targetDirectoryExists)
366     {
367         if (!targetDirectoryExists)
368         {
369             Directory.CreateDirectory(targetPath);
370         }
371
372     /// <summary>
373     /// <para>
374     /// Ensures the source file exists using the specified source path.
375     /// </para>
376     /// <para></para>
377     /// </summary>
378     /// <param name="sourcePath">
379     /// <para>The source path.</para>
```

```

380     ///<para></para>
381     ///</param>
382     ///<exception cref="FileNotFoundException">
383     ///<para>Source file does not exists. </para>
384     ///<para></para>
385     ///</exception>
386     [MethodImpl(MethodImplOptions.AggressiveInlining)]
387     private static void EnsureSourceFileExists(string sourcePath)
388     {
389         if (!File.Exists(sourcePath))
390         {
391             throw new FileNotFoundException("Source file does not exists.", sourcePath);
392         }
393     }
394
395     ///<summary>
396     ///<para>
397     /// Ensures the directory is created using the specified target path.
398     ///</para>
399     ///<para></para>
400     ///</summary>
401     ///<param name="targetPath">
402     ///<para>The target path.</para>
403     ///<para></para>
404     ///</param>
405     [MethodImpl(MethodImplOptions.AggressiveInlining)]
406     private static void EnsureDirectoryIsCreated(string targetPath) =>
407         Directory.CreateDirectory(Path.GetDirectoryName(targetPath));
408
409     ///<summary>
410     ///<para>
411     /// Determines whether directory exists.
412     ///</para>
413     ///<para></para>
414     ///</summary>
415     ///<param name="path">
416     ///<para>The path.</para>
417     ///<para></para>
418     ///</param>
419     ///<returns>
420     ///<para>The bool</para>
421     ///<para></para>
422     ///</returns>
423     [MethodImpl(MethodImplOptions.AggressiveInlining)]
424     private static bool DirectoryExists(string path) => Directory.Exists(path) &&
425         File.GetAttributes(path).HasFlag(FileAttributes.Directory);
426
427     ///<summary>
428     ///<para>
429     /// Determines whether looks like directory path.
430     ///</para>
431     ///<para></para>
432     ///</summary>
433     ///<param name="path">
434     ///<para>The path.</para>
435     ///<para></para>
436     ///</param>
437     ///<returns>
438     ///<para>The bool</para>
439     ///<para></para>
440     ///</returns>
441     [MethodImpl(MethodImplOptions.AggressiveInlining)]
442     private static bool LooksLikeDirectoryPath(string path) =>
443         path.EndsWith(Path.DirectorySeparatorChar.ToString()) ||
444         path.EndsWith(Path.AltDirectorySeparatorChar.ToString());
445     }
446 }

```

1.2 ./csharp/Platform.RegularExpressions.Transformer/IFileTransformer.cs

```

1  using System.Runtime.CompilerServices;
2
3 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
4
5 namespace Platform.RegularExpressions.Transformer
6 {
7     ///<summary>
8     ///<para>
9     /// Defines the file transformer.

```

```

10    ///> </para>
11    ///> </para></para>
12    ///> </summary>
13    ///> <seealso cref="ITransformer"/>
14    public interface IFileTransformer : ITransformer
15    {
16        ///> <summary>
17        ///> <para>
18        ///> Gets the source file extension value.
19        ///> </para>
20        ///> <para></para>
21        ///> </summary>
22        string SourceFileExtension
23        {
24            [MethodImpl(MethodImplOptions.AggressiveInlining)]
25            get;
26        }
27
28        ///> <summary>
29        ///> <para>
30        ///> Gets the target file extension value.
31        ///> </para>
32        ///> <para></para>
33        ///> </summary>
34        string TargetFileExtension
35        {
36            [MethodImpl(MethodImplOptions.AggressiveInlining)]
37            get;
38        }
39
40        ///> <summary>
41        ///> <para>
42        ///> Transforms the source path.
43        ///> </para>
44        ///> <para></para>
45        ///> </summary>
46        ///> <param name="sourcePath">
47        ///> <para>The source path.</para>
48        ///> <para></para>
49        ///> </param>
50        ///> <param name="targetPath">
51        ///> <para>The target path.</para>
52        ///> <para></para>
53        ///> </param>
54        [MethodImpl(MethodImplOptions.AggressiveInlining)]
55        void Transform(string sourcePath, string targetPath);
56    }
57}

```

1.3 ./csharp/Platform.RegularExpressions.Transformer/ISubstitutionRule.cs

```

1  using System.Runtime.CompilerServices;
2  using System.Text.RegularExpressions;
3
4 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
5
6 namespace Platform.RegularExpressions.Transformer
7 {
8     ///> <summary>
9     ///> <para>
10    ///> Defines the substitution rule.
11    ///> </para>
12    ///> <para></para>
13    ///> </summary>
14    public interface ISubstitutionRule
15    {
16        ///> <summary>
17        ///> <para>
18        ///> Gets the match pattern value.
19        ///> </para>
20        ///> <para></para>
21        ///> </summary>
22        Regex MatchPattern
23        {
24            [MethodImpl(MethodImplOptions.AggressiveInlining)]
25            get;
26        }
27
28        ///> <summary>
29        ///> <para>

```

```

30     /// Gets the substitution pattern value.
31     /// </para>
32     /// <para></para>
33     /// </summary>
34     string SubstitutionPattern
35     {
36         [MethodImpl(MethodImplOptions.AggressiveInlining)]
37         get;
38     }
39
40     /// <summary>
41     /// <para>
42     /// Gets the maximum repeat count value.
43     /// </para>
44     /// <para></para>
45     /// </summary>
46     int MaximumRepeatCount
47     {
48         [MethodImpl(MethodImplOptions.AggressiveInlining)]
49         get;
50     }
51 }
52 }
```

1.4 ./csharp/Platform.RegularExpressions.Transformer/ITextTransformer.cs

```

1  using System.Runtime.CompilerServices;
2
3 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
4
5 namespace Platform.RegularExpressions.Transformer
6 {
7     /// <summary>
8     /// <para>
9     /// Defines the text transformer.
10    /// </para>
11   /// <para></para>
12   /// </summary>
13   /// <seealso cref="ITransformer"/>
14   public interface ITextTransformer : ITransformer
15   {
16       /// <summary>
17       /// <para>
18       /// Transforms the source text.
19       /// </para>
20       /// <para></para>
21       /// </summary>
22       /// <param name="sourceText">
23       /// <para>The source text.</para>
24       /// <para></para>
25       /// </param>
26       /// <returns>
27       /// <para>The string</para>
28       /// <para></para>
29       /// </returns>
30       [MethodImpl(MethodImplOptions.AggressiveInlining)]
31       string Transform(string sourceText);
32   }
33 }
```

1.5 ./csharp/Platform.RegularExpressions.Transformer/ITextTransformerExtensions.cs

```

1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Runtime.CompilerServices;
5  using Platform.Collections;
6
7 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
8
9 namespace Platform.RegularExpressions.Transformer
10 {
11     /// <summary>
12     /// <para>
13     /// Represents the text transformer extensions.
14     /// </para>
15     /// <para></para>
16     /// </summary>
17     public static class ITextTransformerExtensions
18     {
19         /// <summary>
```

```

20     /// <para>
21     /// Generates the transformers for each rule using the specified transformer.
22     /// </para>
23     /// <para></para>
24     /// </summary>
25     /// <param name="transformer">
26     /// <para>The transformer.</para>
27     /// <para></para>
28     /// </param>
29     /// <returns>
30     /// <para>The transformers.</para>
31     /// <para></para>
32     /// </returns>
33     [MethodImpl(MethodImplOptions.AggressiveInlining)]
34     public static IList<ITextTransformer> GenerateTransformersForEachRule(this
35         ITextTransformer transformer)
36     {
37         var transformers = new List<ITextTransformer>();
38         for (int i = 1; i <= transformer.Rules.Count; i++)
39         {
40             transformers.Add(new TextTransformer(transformer.Rules.Take(i).ToList()));
41         }
42         return transformers;
43     }
44
45     /// <summary>
46     /// <para>
47     /// Gets the steps using the specified transformer.
48     /// </para>
49     /// <para></para>
50     /// </summary>
51     /// <param name="transformer">
52     /// <para>The transformer.</para>
53     /// <para></para>
54     /// </param>
55     /// <param name="sourceText">
56     /// <para>The source text.</para>
57     /// <para></para>
58     /// </param>
59     /// <returns>
60     /// <para>A list of string</para>
61     /// <para></para>
62     /// </returns>
63     [MethodImpl(MethodImplOptions.AggressiveInlining)]
64     public static IList<string> GetSteps(this ITextTransformer transformer, string
65         sourceText)
66     {
67         if (transformer != null && !transformer.Rules.IsNullOrEmpty())
68         {
69             var steps = new List<string>();
70             var steppedTransformer = new TextSteppedTransformer(transformer.Rules,
71                 sourceText);
72             while (steppedTransformer.Next())
73             {
74                 steps.Add(steppedTransformer.Text);
75             }
76             return steps;
77         }
78         else
79         {
80             return Array.Empty<string>();
81         }
82     }
83
84     /// <summary>
85     /// <para>
86     /// Writes the steps to files using the specified transformer.
87     /// </para>
88     /// <para></para>
89     /// </summary>
90     /// <param name="transformer">
91     /// <para>The transformer.</para>
92     /// <para></para>
93     /// </param>
94     /// <param name="sourceText">

```

```

95     ///<param name="targetPath">
96     ///<para>The target path.</para>
97     ///<para></para>
98     ///</param>
99     ///<param name="skipFilesWithNoChanges">
100    ///<para>The skip files with no changes.</para>
101    ///<para></para>
102    ///</param>
103    [MethodImpl(MethodImplOptions.AggressiveInlining)]
104    public static void WriteStepsToFiles(this ITextTransformer transformer, string
105      → sourceText, string targetPath, bool skipFilesWithNoChanges)
106    {
107      if (transformer != null && !transformer.Rules.IsNullOrEmpty())
108      {
109        targetPath.GetPathParts(out var directoryName, out var targetFilename, out var
110          → targetExtension);
111        Steps.DeleteAllSteps(directoryName, targetFilename, targetExtension);
112        var lastText = "";
113        var steppedTransformer = new TextSteppedTransformer(transformer.Rules,
114          → sourceText);
115        while (steppedTransformer.Next())
116        {
117          var newText = steppedTransformer.Text;
118          Steps.WriteStep(transformer, directoryName, targetFilename, targetExtension,
119            → steppedTransformer.Current, ref lastText, newText,
120            → skipFilesWithNoChanges);
121        }
122      }
123    }
124  }

```

1.6 ./csharp/Platform.RegularExpressions.Transformer/ITextTransformersListExtensions.cs

```

1  using System;
2  using System.Collections.Generic;
3  using System.Runtime.CompilerServices;
4  using Platform.Collections;
5
6 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
7
8 namespace Platform.RegularExpressions.Transformer
9 {
10   ///<summary>
11   ///<para>
12   /// Represents the text transformers list extensions.
13   ///</para>
14   ///<para></para>
15   ///</summary>
16   public static class ITextTransformersListExtensions
17   {
18     ///<summary>
19     ///<para>
20     /// Transforms the with all using the specified transformers.
21     ///</para>
22     ///<para></para>
23     ///</summary>
24     ///<param name="transformers">
25     ///<para>The transformers.</para>
26     ///<para></para>
27     ///</param>
28     ///<param name="source">
29     ///<para>The source.</para>
30     ///<para></para>
31     ///</param>
32     ///<returns>
33     ///<para>A list of string</para>
34     ///<para></para>
35     ///</returns>
36     [MethodImpl(MethodImplOptions.AggressiveInlining)]
37     public static IList<string> TransformWithAll(this IList<ITextTransformer> transformers,
38       → string source)
39     {
40       if (!transformers.IsNullOrEmpty())
41       {
42         var steps = new List<string>();
43         for (int i = 0; i < transformers.Count; i++)
44         {
45           steps.Add(transformers[i].Transform(source));

```

```

45     }
46     return steps;
47   }
48   else
49   {
50     return Array.Empty<string>();
51   }
52 }
53
54 /// <summary>
55 /// <para>
56 /// Transforms the with all to files using the specified transformers.
57 /// </para>
58 /// <para></para>
59 /// </summary>
60 /// <param name="transformers">
61 /// <para>The transformers.</para>
62 /// <para></para>
63 /// </param>
64 /// <param name="sourceText">
65 /// <para>The source text.</para>
66 /// <para></para>
67 /// </param>
68 /// <param name="targetPath">
69 /// <para>The target path.</para>
70 /// <para></para>
71 /// </param>
72 /// <param name="skipFilesWithNoChanges">
73 /// <para>The skip files with no changes.</para>
74 /// <para></para>
75 /// </param>
76 [MethodImpl(MethodImplOptions.AggressiveInlining)]
77 public static void TransformWithAllToFiles(this IList<ITextTransformer> transformers,
78   string sourceText, string targetPath, bool skipFilesWithNoChanges)
79 {
80   if (!transformers.IsNullOrEmpty())
81   {
82     targetPath.GetPathParts(out var directoryName, out var targetFilename, out var
83     targetExtension);
84     Steps.DeleteAllSteps(directoryName, targetFilename, targetExtension);
85     var lastText = "";
86     for (int i = 0; i < transformers.Count; i++)
87     {
88       var transformer = transformers[i];
89       var newText = transformer.Transform(sourceText);
90       Steps.WriteStep(transformer, directoryName, targetFilename, targetExtension,
91         i, ref lastText, newText, skipFilesWithNoChanges);
92     }
93   }
94 }

```

1.7 ./csharp/Platform.RegularExpressions.Transformer/ITransformer.cs

```

1  using System.Collections.Generic;
2  using System.Runtime.CompilerServices;
3
4 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
5
6 namespace Platform.RegularExpressions.Transformer
7 {
8   /// <summary>
9   /// <para>
10  /// Defines the transformer.
11  /// </para>
12  /// <para></para>
13  /// </summary>
14  public interface ITransformer
15  {
16    /// <summary>
17    /// <para>
18    /// Gets the rules value.
19    /// </para>
20    /// <para></para>
21    /// </summary>
22    IList<ISubstitutionRule> Rules
23    {
24      [MethodImpl(MethodImplOptions.AggressiveInlining)]

```

```

25         get;
26     }
27 }
28 }

1.8 ./csharp/Platform.RegularExpressions.Transformer/LoggingFileTransformer.cs
1  using System.IO;
2  using System.Runtime.CompilerServices;
3  using System.Text;
4
5 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
6
7 namespace Platform.RegularExpressions.Transformer
8 {
9     /// <summary>
10    /// <para>
11    /// Represents the logging file transformer.
12    /// </para>
13    /// <para></para>
14    /// </summary>
15    /// <seealso cref="FileTransformer"/>
16    public class LoggingFileTransformer : FileTransformer
17 {
18        /// <summary>
19        /// <para>
20        /// Initializes a new <see cref="LoggingFileTransformer"/> instance.
21        /// </para>
22        /// <para></para>
23        /// </summary>
24        /// <param name="textTransformer">
25        /// <para>A text transformer.</para>
26        /// <para></para>
27        /// </param>
28        /// <param name="sourceFileExtension">
29        /// <para>A source file extension.</para>
30        /// <para></para>
31        /// </param>
32        /// <param name="targetFileExtension">
33        /// <para>A target file extension.</para>
34        /// <para></para>
35        /// </param>
36        [MethodImpl(MethodImplOptions.AggressiveInlining)]
37        public LoggingFileTransformer(ITextTransformer textTransformer, string
38             sourceFileExtension, string targetFileExtension) : base(textTransformer,
39             sourceFileExtension, targetFileExtension) { }

40        /// <summary>
41        /// <para>
42        /// Transforms the file using the specified source path.
43        /// </para>
44        /// <para></para>
45        /// </summary>
46        /// <param name="sourcePath">
47        /// <para>The source path.</para>
48        /// <para></para>
49        /// <param name="targetPath">
50        /// <para>The target path.</para>
51        /// <para></para>
52        /// </param>
53        [MethodImpl(MethodImplOptions.AggressiveInlining)]
54        protected override void TransformFile(string sourcePath, string targetPath)
55        {
56            base.TransformFile(sourcePath, targetPath);
57            // Logging
58            var sourceText = File.ReadAllText(sourcePath, Encoding.UTF8);
59            _textTransformer.WriteStepsToFiles(sourceText, targetPath, skipFilesWithNoChanges:
60                true);
61        }
62    }

```

1.9 ./csharp/Platform.RegularExpressions.Transformer/RegexExtensions.cs

```

1  using System;
2  using System.Runtime.CompilerServices;
3  using System.Text.RegularExpressions;
4
5 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member

```

```

6 namespace Platform.RegularExpressions.Transformer
7 {
8     /// <summary>
9     /// <para>
10    /// Represents the regex extensions.
11    /// </para>
12    /// <para></para>
13    /// </summary>
14    public static class RegexExtensions
15    {
16        /// <summary>
17        /// <para>
18        /// Overrides the options using the specified regex.
19        /// </para>
20        /// <para></para>
21        /// </summary>
22        /// <param name="regex">
23        /// <para>The regex.</para>
24        /// <para></para>
25        /// </param>
26        /// <param name="options">
27        /// <para>The options.</para>
28        /// <para></para>
29        /// </param>
30        /// <param name="matchTimeout">
31        /// <para>The match timeout.</para>
32        /// <para></para>
33        /// </param>
34        /// <returns>
35        /// <para>The regex</para>
36        /// <para></para>
37        /// </returns>
38        [MethodImpl(MethodImplOptions.AggressiveInlining)]
39        public static Regex OverrideOptions(this Regex regex, RegexOptions options, TimeSpan
40            → matchTimeout)
41        {
42            if (regex == null)
43            {
44                return null;
45            }
46            return new Regex(regex.ToString(), options, matchTimeout);
47        }
48    }
49 }

```

1.10 ./csharp/Platform.RegularExpressions.Transformer/Steps.cs

```

1  using Platform.IO;
2  using System.Runtime.CompilerServices;
3
4 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
5
6 namespace Platform.RegularExpressions.Transformer
7 {
8     /// <summary>
9     /// <para>
10    /// Represents the steps.
11    /// </para>
12    /// <para></para>
13    /// </summary>
14    public static class Steps
15    {
16        /// <summary>
17        /// <para>
18        /// Deletes the all steps using the specified directory name.
19        /// </para>
20        /// <para></para>
21        /// </summary>
22        /// <param name="directoryName">
23        /// <para>The directory name.</para>
24        /// <para></para>
25        /// </param>
26        /// <param name="targetFilename">
27        /// <para>The target filename.</para>
28        /// <para></para>
29        /// </param>
30        /// <param name="targetExtension">
31        /// <para>The target extension.</para>

```

```

32     /// <para></para>
33     /// </param>
34     [MethodImpl(MethodImplOptions.AggressiveInlining)]
35     public static void DeleteAllSteps(string directoryName, string targetFilename, string
36         → targetExtension)
37     {
38         FileHelpers.DeleteAll(directoryName, $"{targetFilename}.*.rule.txt");
39         FileHelpers.DeleteAll(directoryName, $"{targetFilename}.*{targetExtension}");
40     }
41
42     /// <summary>
43     /// <para>
44     /// Writes the step using the specified transformer.
45     /// </para>
46     /// <para></para>
47     /// </summary>
48     /// <param name="transformer">
49     /// <para>The transformer.</para>
50     /// <para></para>
51     /// </param>
52     /// <param name="directoryName">
53     /// <para>The directory name.</para>
54     /// <para></para>
55     /// </param>
56     /// <param name="targetFilename">
57     /// <para>The target filename.</para>
58     /// <para></para>
59     /// </param>
60     /// <param name="targetExtension">
61     /// <para>The target extension.</para>
62     /// <para></para>
63     /// </param>
64     /// <param name="currentStep">
65     /// <para>The current step.</para>
66     /// <para></para>
67     /// </param>
68     /// <param name="lastText">
69     /// <para>The last text.</para>
70     /// <para></para>
71     /// </param>
72     /// <param name="newText">
73     /// <para>The new text.</para>
74     /// <para></para>
75     /// </param>
76     /// <param name="skipFilesWithNoChanges">
77     /// <para>The skip files with no changes.</para>
78     /// <para></para>
79     /// </param>
80     [MethodImpl(MethodImplOptions.AggressiveInlining)]
81     public static void WriteStep(ITransformer transformer, string directoryName, string
82         → targetFilename, string targetExtension, int currentStep, ref string lastText, string
83         → newText, bool skipFilesWithNoChanges)
84     {
85         if (!(skipFilesWithNoChanges && string.Equals(lastText, newText)))
86         {
87             lastText = newText;
88             newText.WriteLine(directoryName,
89                 → $"{targetFilename}.{currentStep}{targetExtension}");
90             var ruleString = transformer.Rules[currentStep].ToString();
91             ruleString.WriteLine(directoryName,
92                 → $"{targetFilename}.{currentStep}.rule.txt");
93         }
94     }
95 }

```

1.11 ./csharp/Platform.RegularExpressions.Transformer/StringExtensions.cs

```

1  using System.IO;
2  using System.Runtime.CompilerServices;
3  using System.Text;
4
5 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
6
7 namespace Platform.RegularExpressions.Transformer
8 {
9     /// <summary>
10    /// <para>
11    /// Represents the string extensions.

```

```

12     ///</para>
13     ///<para></para>
14     ///</summary>
15     internal static class StringExtensions
16     {
17         ///<summary>
18         ///<para>
19         /// Gets the path parts using the specified path.
20         ///</para>
21         ///<para></para>
22         ///</summary>
23         ///<param name="path">
24         ///<para>The path.</para>
25         ///<para></para>
26         ///</param>
27         ///<param name="directoryName">
28         ///<para>The directory name.</para>
29         ///<para></para>
30         ///</param>
31         ///<param name="targetFilename">
32         ///<para>The target filename.</para>
33         ///<para></para>
34         ///</param>
35         ///<param name="targetExtension">
36         ///<para>The target extension.</para>
37         ///<para></para>
38         ///</param>
39     [MethodImpl(MethodImplOptions.AggressiveInlining)]
40     public static void GetPathParts(this string path, out string directoryName, out string
41         targetFilename, out string targetExtension) => (directoryName, targetFilename,
42         targetExtension) = (Path.GetDirectoryName(path),
43         Path.GetFileNameWithoutExtension(path), Path.GetExtension(path));
44
45         ///<summary>
46         ///<para>
47         /// Writes the to file using the specified text.
48         ///</para>
49         ///<para></para>
50         ///</summary>
51         ///<param name="text">
52         ///<para>The text.</para>
53         ///<para></para>
54         ///</param>
55         ///<param name="directoryName">
56         ///<para>The directory name.</para>
57         ///<para></para>
58         ///</param>
59         ///<param name="targetFilename">
60         ///<para>The target filename.</para>
61         ///<para></para>
62         ///</param>
63     [MethodImpl(MethodImplOptions.AggressiveInlining)]
64     public static void WriteToFile(this string text, string directoryName, string
65         targetFilename) => File.WriteAllText(Path.Combine(directoryName, targetFilename),
66         text, Encoding.UTF8);
67     }
68 }

```

1.12 ./csharp/Platform.RegularExpressions.Transformer/SubstitutionRule.cs

```

1  using System;
2  using System.Runtime.CompilerServices;
3  using System.Text;
4  using System.Text.RegularExpressions;
5
6 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
7
8 namespace Platform.RegularExpressions.Transformer
9 {
10     ///<summary>
11     ///<para>
12     /// Represents the substitution rule.
13     ///</para>
14     ///<para></para>
15     ///</summary>
16     ///<seealso cref="ISubstitutionRule"/>
17     public class SubstitutionRule : ISubstitutionRule
18     {
19         ///<summary>

```

```

20     /// <para>
21     /// The from minutes.
22     /// </para>
23     /// <para></para>
24     /// </summary>
25     public static readonly TimeSpan DefaultMatchTimeout = TimeSpan.FromMinutes(5);
26     /// <summary>
27     /// <para>
28     /// The multiline.
29     /// </para>
30     /// <para></para>
31     /// </summary>
32     public static readonly RegexOptions DefaultMatchPatternRegexOptions =
33         RegexOptions.Compiled | RegexOptions.Multiline;
34     /// <summary>
35     /// <para>
36     /// Gets or sets the match pattern value.
37     /// </para>
38     /// <para></para>
39     /// </summary>
40     public Regex MatchPattern
41     {
42         [MethodImpl(MethodImplOptions.AggressiveInlining)]
43         get;
44         [MethodImpl(MethodImplOptions.AggressiveInlining)]
45         set;
46     }
47
48     /// <summary>
49     /// <para>
50     /// Gets or sets the substitution pattern value.
51     /// </para>
52     /// <para></para>
53     /// </summary>
54     public string SubstitutionPattern
55     {
56         [MethodImpl(MethodImplOptions.AggressiveInlining)]
57         get;
58         [MethodImpl(MethodImplOptions.AggressiveInlining)]
59         set;
60     }
61
62     /// <summary>
63     /// <para>
64     /// Gets or sets the path pattern value.
65     /// </para>
66     /// <para></para>
67     /// </summary>
68     public Regex PathPattern
69     {
70         [MethodImpl(MethodImplOptions.AggressiveInlining)]
71         get;
72         [MethodImpl(MethodImplOptions.AggressiveInlining)]
73         set;
74     }
75
76     /// <summary>
77     /// <para>
78     /// Gets or sets the maximum repeat count value.
79     /// </para>
80     /// <para></para>
81     /// </summary>
82     public int MaximumRepeatCount
83     {
84         [MethodImpl(MethodImplOptions.AggressiveInlining)]
85         get;
86         [MethodImpl(MethodImplOptions.AggressiveInlining)]
87         set;
88     }
89
90     /// <summary>
91     /// <para>
92     /// Initializes a new <see cref="SubstitutionRule"/> instance.
93     /// </para>
94     /// <para></para>
95     /// </summary>
96     /// <param name="matchPattern">
97     /// <para>A match pattern.</para>

```

```

98     /// <para></para>
99     /// </param>
100    /// <param name="substitutionPattern">
101    /// <para>A substitution pattern.</para>
102    /// <para></para>
103    /// </param>
104    /// <param name="maximumRepeatCount">
105    /// <para>A maximum repeat count.</para>
106    /// <para></para>
107    /// </param>
108    /// <param name="matchPatternOptions">
109    /// <para>A match pattern options.</para>
110    /// <para></para>
111    /// </param>
112    /// <param name="matchTimeout">
113    /// <para>A match timeout.</para>
114    /// <para></para>
115    /// </param>
116    [MethodImpl(MethodImplOptions.AggressiveInlining)]
117    public SubstitutionRule(Regex matchPattern, string substitutionPattern, int
118        → maximumRepeatCount, RegexOptions? matchPatternOptions, TimeSpan? matchTimeout)
119    {
120        MatchPattern = matchPattern;
121        SubstitutionPattern = substitutionPattern;
122        MaximumRepeatCount = maximumRepeatCount;
123        OverrideMatchPatternOptions(matchPatternOptions ?? matchPattern.Options,
124            → matchTimeout ?? matchPattern.MatchTimeout);
125    }
126
127    /// <summary>
128    /// <para>
129    /// Initializes a new <see cref="SubstitutionRule"/> instance.
130    /// </para>
131    /// <para></para>
132    /// </summary>
133    /// <param name="matchPattern">
134    /// <para>A match pattern.</para>
135    /// <para></para>
136    /// <param name="substitutionPattern">
137    /// <para>A substitution pattern.</para>
138    /// <para></para>
139    /// <param name="maximumRepeatCount">
140    /// <para>A maximum repeat count.</para>
141    /// <para></para>
142    /// <param name="useDefaultOptions">
143    /// <para>A use default options.</para>
144    /// <para></para>
145    /// <param name="matchPattern">
146    /// <para></para>
147    [MethodImpl(MethodImplOptions.AggressiveInlining)]
148    public SubstitutionRule(Regex matchPattern, string substitutionPattern, int
149        → maximumRepeatCount, bool useDefaultOptions) : this(matchPattern,
150        → substitutionPattern, maximumRepeatCount, useDefaultOptions ?
151        → DefaultMatchPatternRegexOptions : (RegexOptions?)null, useDefaultOptions ?
152        → DefaultMatchTimeout : (TimeSpan?)null) { }
153
154    /// <summary>
155    /// <para>
156    /// Initializes a new <see cref="SubstitutionRule"/> instance.
157    /// </para>
158    /// <para></para>
159    /// </summary>
160    /// <param name="matchPattern">
161    /// <para>A match pattern.</para>
162    /// <para></para>
163    /// <param name="substitutionPattern">
164    /// <para>A substitution pattern.</para>
165    /// <para></para>
166    /// <param name="maximumRepeatCount">
167    /// <para>A maximum repeat count.</para>
168    /// <para></para>
169    /// </param>
170    [MethodImpl(MethodImplOptions.AggressiveInlining)]

```

```

169 public SubstitutionRule(Regex matchPattern, string substitutionPattern, int
170   ↪ maximumRepeatCount) : this(matchPattern, substitutionPattern, maximumRepeatCount,
171   ↪ true) { }
172
173 /// <summary>
174 /// <para>
175 /// Initializes a new <see cref="SubstitutionRule"/> instance.
176 /// </para>
177 /// <para></para>
178 /// </summary>
179 /// <param name="matchPattern">
180 /// <para>A match pattern.</para>
181 /// <para></para>
182 /// </param>
183 /// <param name="substitutionPattern">
184 /// <para>A substitution pattern.</para>
185 /// <para></para>
186 /// </param>
187 [MethodImpl(MethodImplOptions.AggressiveInlining)]
188 public SubstitutionRule(Regex matchPattern, string substitutionPattern) :
189   ↪ this(matchPattern, substitutionPattern, 0) { }
190
191 [MethodImpl(MethodImplOptions.AggressiveInlining)]
192 public static implicit operator SubstitutionRule(ValueTuple<string, string> tuple) =>
193   ↪ new SubstitutionRule(new Regex(tuple.Item1), tuple.Item2);
194
195 [MethodImpl(MethodImplOptions.AggressiveInlining)]
196 public static implicit operator SubstitutionRule(ValueTuple<Regex, string> tuple) => new
197   ↪ SubstitutionRule(tuple.Item1, tuple.Item2);
198
199 [MethodImpl(MethodImplOptions.AggressiveInlining)]
200 public static implicit operator SubstitutionRule(ValueTuple<string, string, int> tuple)
201   ↪ => new SubstitutionRule(new Regex(tuple.Item1), tuple.Item2, tuple.Item3);
202
203 [MethodImpl(MethodImplOptions.AggressiveInlining)]
204 public static implicit operator SubstitutionRule(ValueTuple<Regex, string, int> tuple)
205   ↪ => new SubstitutionRule(tuple.Item1, tuple.Item2, tuple.Item3);
206
207 /// <summary>
208 /// <para>
209 /// Overrides the match pattern options using the specified options.
210 /// </para>
211 /// <para></para>
212 /// </summary>
213 /// <param name="options">
214 /// <para>The options.</para>
215 /// <para></para>
216 /// </param>
217 /// <param name="matchTimeout">
218 /// <para>The match timeout.</para>
219 /// <para></para>
220 /// </param>
221 [MethodImpl(MethodImplOptions.AggressiveInlining)]
222 public void OverrideMatchPatternOptions(RegexOptions options, TimeSpan matchTimeout) =>
223   ↪ MatchPattern = MatchPattern.OverrideOptions(options, matchTimeout);
224
225 /// <summary>
226 /// <para>
227 /// Overrides the path pattern options using the specified options.
228 /// </para>
229 /// <para></para>
230 /// </summary>
231 /// <param name="options">
232 /// <para>The options.</para>
233 /// <para></para>
234 /// </param>
235 /// <param name="matchTimeout">
236 /// <para>The match timeout.</para>
237 /// <para></para>
238 /// </param>
239 [MethodImpl(MethodImplOptions.AggressiveInlining)]
240 public void OverridePathPatternOptions(RegexOptions options, TimeSpan matchTimeout) =>
241   ↪ PathPattern = PathPattern.OverrideOptions(options, matchTimeout);
242
243 /// <summary>
244 /// <para>
245 /// Returns the string.

```

```

237     ///</para>
238     ///<para></para>
239     ///</summary>
240     ///<returns>
241     ///<para>The string</para>
242     ///<para></para>
243     ///</returns>
244     [MethodImpl(MethodImplOptions.AggressiveInlining)]
245     public override string ToString()
246     {
247         var sb = new StringBuilder();
248         sb.Append('\'');
249         sb.Append(MatchPattern.ToString());
250         sb.Append('\'');
251         sb.Append(" -> ");
252         sb.Append('\'');
253         sb.Append(SubstitutionPattern);
254         sb.Append('\'');
255         if (PathPattern != null)
256         {
257             sb.Append(" on files ");
258             sb.Append('\'');
259             sb.Append(PathPattern.ToString());
260             sb.Append('\'');
261         }
262         if (MaximumRepeatCount > 0)
263         {
264             if (MaximumRepeatCount >= int.MaxValue)
265             {
266                 sb.Append(" repeated forever");
267             }
268             else
269             {
270                 sb.Append(" repeated up to ");
271                 sb.Append(MaximumRepeatCount);
272                 sb.Append(" times");
273             }
274         }
275         return sb.ToString();
276     }
277 }
278 }
```

1.13 ./csharp/Platform.RegularExpressions.Transformer/TextSteppedTransformer.cs

```

1  using System;
2  using System.Collections.Generic;
3  using System.Runtime.CompilerServices;
4
5 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
6
7 namespace Platform.RegularExpressions.Transformer
8 {
9     ///<summary>
10    ///<para>
11    /// Represents the text stepped transformer.
12    ///</para>
13    ///<para></para>
14    ///</summary>
15    ///<seealso cref="ITransformer"/>
16    public class TextSteppedTransformer : ITransformer
17    {
18        ///<summary>
19        ///<para>
20        /// Gets or sets the rules value.
21        ///</para>
22        ///<para></para>
23        ///</summary>
24        public IList<ISubstitutionRule> Rules
25        {
26            [MethodImpl(MethodImplOptions.AggressiveInlining)]
27            get;
28            [MethodImpl(MethodImplOptions.AggressiveInlining)]
29            set;
30        }
31
32        ///<summary>
33        ///<para>
34        /// Gets or sets the text value.
35        ///</para>
```

```
36     /// <para></para>
37     /// </summary>
38     public string Text
39     {
40         [MethodImpl(MethodImplOptions.AggressiveInlining)]
41         get;
42         [MethodImpl(MethodImplOptions.AggressiveInlining)]
43         set;
44     }
45
46     /// <summary>
47     /// <para>
48     /// Gets or sets the current value.
49     /// </para>
50     /// <para></para>
51     /// </summary>
52     public int Current
53     {
54         [MethodImpl(MethodImplOptions.AggressiveInlining)]
55         get;
56         [MethodImpl(MethodImplOptions.AggressiveInlining)]
57         set;
58     }
59
60     /// <summary>
61     /// <para>
62     /// Initializes a new <see cref="TextSteppedTransformer"/> instance.
63     /// </para>
64     /// <para></para>
65     /// </summary>
66     /// <param name="rules">
67     /// <para>A rules.</para>
68     /// <para></para>
69     /// </param>
70     /// <param name="text">
71     /// <para>A text.</para>
72     /// <para></para>
73     /// </param>
74     /// <param name="current">
75     /// <para>A current.</para>
76     /// <para></para>
77     /// </param>
78     [MethodImpl(MethodImplOptions.AggressiveInlining)]
79     public TextSteppedTransformer(IList<ISubstitutionRule> rules, string text, int current)
80     => Reset(rules, text, current);
81
82     /// <summary>
83     /// <para>
84     /// Initializes a new <see cref="TextSteppedTransformer"/> instance.
85     /// </para>
86     /// <para></para>
87     /// </summary>
88     /// <param name="rules">
89     /// <para>A rules.</para>
90     /// <para></para>
91     /// </param>
92     /// <param name="text">
93     /// <para>A text.</para>
94     /// <para></para>
95     /// </param>
96     [MethodImpl(MethodImplOptions.AggressiveInlining)]
97     public TextSteppedTransformer(IList<ISubstitutionRule> rules, string text) =>
98     => Reset(rules, text);
99
100    /// <summary>
101    /// <para>
102    /// Initializes a new <see cref="TextSteppedTransformer"/> instance.
103    /// </para>
104    /// <para></para>
105    /// </summary>
106    /// <param name="rules">
107    /// <para>A rules.</para>
108    /// <para></para>
109    /// </param>
110    [MethodImpl(MethodImplOptions.AggressiveInlining)]
111    public TextSteppedTransformer(IList<ISubstitutionRule> rules) => Reset(rules);
112
113    /// <summary>
```

```
112     /// <para>
113     /// Initializes a new <see cref="TextSteppedTransformer"/> instance.
114     /// </para>
115     /// <para></para>
116     /// </summary>
117     [MethodImpl(MethodImplOptions.AggressiveInlining)]
118     public TextSteppedTransformer() => Reset();
119
120     /// <summary>
121     /// <para>
122     /// Resets the rules.
123     /// </para>
124     /// <para></para>
125     /// </summary>
126     /// <param name="rules">
127     /// <para>The rules.</para>
128     /// <para></para>
129     /// </param>
130     /// <param name="text">
131     /// <para>The text.</para>
132     /// <para></para>
133     /// </param>
134     /// <param name="current">
135     /// <para>The current.</para>
136     /// <para></para>
137     /// </param>
138     [MethodImpl(MethodImplOptions.AggressiveInlining)]
139     public void Reset(IList<ISubstitutionRule> rules, string text, int current)
140     {
141         Rules = rules;
142         Text = text;
143         Current = current;
144     }
145
146     /// <summary>
147     /// <para>
148     /// Resets the rules.
149     /// </para>
150     /// <para></para>
151     /// </summary>
152     /// <param name="rules">
153     /// <para>The rules.</para>
154     /// <para></para>
155     /// </param>
156     /// <param name="text">
157     /// <para>The text.</para>
158     /// <para></para>
159     /// </param>
160     [MethodImpl(MethodImplOptions.AggressiveInlining)]
161     public void Reset(IList<ISubstitutionRule> rules, string text) => Reset(rules, text, -1);
162
163     /// <summary>
164     /// <para>
165     /// Resets the rules.
166     /// </para>
167     /// <para></para>
168     /// </summary>
169     /// <param name="rules">
170     /// <para>The rules.</para>
171     /// <para></para>
172     /// </param>
173     [MethodImpl(MethodImplOptions.AggressiveInlining)]
174     public void Reset(IList<ISubstitutionRule> rules) => Reset(rules, "", -1);
175
176     /// <summary>
177     /// <para>
178     /// Resets the text.
179     /// </para>
180     /// <para></para>
181     /// </summary>
182     /// <param name="text">
183     /// <para>The text.</para>
184     /// <para></para>
185     /// </param>
186     [MethodImpl(MethodImplOptions.AggressiveInlining)]
187     public void Reset(string text) => Reset(Rules, text, -1);
188
189     /// <summary>
```

```

190     ///<para>
191     ///<summary>Resets this instance.</summary>
192     ///</para>
193     ///<para></para>
194     ///</summary>
195     [MethodImpl(MethodImplOptions.AggressiveInlining)]
196     public void Reset() => Reset(Array.Empty<ISubstitutionRule>(), "", -1);
197
198     ///<summary>
199     ///<para>
200     ///Determines whether this instance next.
201     ///</para>
202     ///<para></para>
203     ///</summary>
204     ///<returns>
205     ///<para>The bool</para>
206     ///<para></para>
207     ///</returns>
208     [MethodImpl(MethodImplOptions.AggressiveInlining)]
209     public bool Next()
210     {
211         var current = Current + 1;
212         if (current >= Rules.Count)
213         {
214             return false;
215         }
216         var rule = Rules[current];
217         var matchPattern = rule.MatchPattern;
218         var substitutionPattern = rule.SubstitutionPattern;
219         var maximumRepeatCount = rule.MaximumRepeatCount;
220         var replaceCount = 0;
221         var text = Text;
222         do
223         {
224             text = matchPattern.Replace(text, substitutionPattern);
225             replaceCount++;
226         }
227         while ((maximumRepeatCount == int.MaxValue || replaceCount <= maximumRepeatCount) &&
228             → matchPattern.IsMatch(text));
229         Text = text;
230         Current = current;
231         return true;
232     }
233 }

```

1.14 ./csharp/Platform.RegularExpressions.Transformer/TextTransformer.cs

```

1  using System.Collections.Generic;
2  using System.Runtime.CompilerServices;
3
4 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
5
6 namespace Platform.RegularExpressions.Transformer
7 {
8     ///<summary>
9     ///<para>
10    ///Represents the text transformer.
11    ///</para>
12    ///<para></para>
13    ///</summary>
14    ///<seealso cref="ITextTransformer"/>
15    public class TextTransformer : ITextTransformer
16    {
17        ///<summary>
18        ///<para>
19        ///Gets or sets the rules value.
20        ///</para>
21        ///<para></para>
22        ///</summary>
23        public IList<ISubstitutionRule> Rules
24        {
25            [MethodImpl(MethodImplOptions.AggressiveInlining)]
26            get;
27            [MethodImpl(MethodImplOptions.AggressiveInlining)]
28            private set;
29        }
30
31        ///<summary>
32        ///<para>
33        ///Initializes a new <see cref="TextTransformer"/> instance.

```

```

34     ///> </para>
35     ///> <para></para>
36     ///> </summary>
37     ///> <param name="substitutionRules">
38     ///> <para>A substitution rules.</para>
39     ///> <para></para>
40     ///> </param>
41     [MethodImpl(MethodImplOptions.AggressiveInlining)]
42     public TextTransformer(IList<ISubstitutionRule> substitutionRules)
43     {
44         Rules = substitutionRules;
45     }
46
47     ///> <summary>
48     ///> <para>
49     ///> Transforms the source.
50     ///> </para>
51     ///> <para></para>
52     ///> </summary>
53     ///> <param name="source">
54     ///> <para>The source.</para>
55     ///> <para></para>
56     ///> </param>
57     ///> <returns>
58     ///> <para>The string</para>
59     ///> <para></para>
60     ///> </returns>
61     [MethodImpl(MethodImplOptions.AggressiveInlining)]
62     public string Transform(string source)
63     {
64         var baseTrasformer = new TextSteppedTransformer(Rules);
65         baseTrasformer.Reset(source);
66         while (baseTrasformer.Next());
67         return baseTrasformer.Text;
68     }
69 }

```

1.15 ./csharp/Platform.RegularExpressions.Transformer/TransformerCLI.cs

```

1  using System.Runtime.CompilerServices;
2  using Platform.Collections.Arrays;
3
4 #pragma warning disable CS1591 // Missing XML comment for publicly visible type or member
5
6 namespace Platform.RegularExpressions.Transformer
7 {
8     ///> <summary>
9     ///> <para>
10    ///> Represents the transformer cli.
11    ///> </para>
12    ///> <para></para>
13    ///> </summary>
14    public class TransformerCLI
15    {
16        ///> <summary>
17        ///> <para>
18        ///> The transformer.
19        ///> </para>
20        ///> <para></para>
21        ///> </summary>
22        private readonly IFileTransformer _transformer;
23
24        ///> <summary>
25        ///> <para>
26        ///> Initializes a new <see cref="TransformerCLI"/> instance.
27        ///> </para>
28        ///> <para></para>
29        ///> </summary>
30        ///> <param name="transformer">
31        ///> <para>A transformer.</para>
32        ///> <para></para>
33        ///> </param>
34        [MethodImpl(MethodImplOptions.AggressiveInlining)]
35        public TransformerCLI(IFileTransformer transformer) => _transformer = transformer;
36
37        ///> <summary>
38        ///> <para>
39        ///> Runs the args.
40        ///> </para>

```

```

41     /// <para></para>
42     /// </summary>
43     /// <param name="args">
44     /// <para>The args.</para>
45     /// <para></para>
46     /// </param>
47     [MethodImpl(MethodImplOptions.AggressiveInlining)]
48     public void Run(string[] args)
49     {
50         var sourcePath = args.GetElementOrDefault(0);
51         var targetPath = args.GetElementOrDefault(1);
52         _transformer.Transform(sourcePath, targetPath);
53     }
54 }

```

1.16 ./csharp/Platform.RegularExpressions.Transformer.Tests/FileTransformerTests.cs

```

1  using System.IO;
2  using Xunit;
3
4  namespace Platform.RegularExpressions.Transformer.Tests
5  {
6      /// <summary>
7      /// <para>
8      /// Represents the file transformer tests.
9      /// </para>
10     /// <para></para>
11     /// </summary>
12     public class FileTransformerTests
13     {
14         /// <summary>
15         /// <para>
16         /// Tests that folder to folder transformation test.
17         /// </para>
18         /// <para></para>
19         /// </summary>
20         [Fact]
21         public void FolderToFolderTransfomationTest()
22         {
23             var tempPath = Path.GetTempPath();
24             var sourceFolderPath = Path.Combine(tempPath,
25                 "FileTransformerTestsFolderToFolderTransfomationTestSourceFolder");
26             var targetFolderPath = Path.Combine(tempPath,
27                 "FileTransformerTestsFolderToFolderTransfomationTestTargetFolder");
28
29             var baseTransformer = new TextTransformer(new SubstitutionRule[]
30             {
31                 ("a", "b"),
32                 ("b", "c")
33             });
34             var fileTransformer = new FileTransformer(baseTransformer, ".cs", ".cpp");
35
36             // Delete before creation (if previous test failed)
37             if (Directory.Exists(sourceFolderPath))
38             {
39                 Directory.Delete(sourceFolderPath, true);
40             }
41             if (Directory.Exists(targetFolderPath))
42             {
43                 Directory.Delete(targetFolderPath, true);
44             }
45
46             Directory.CreateDirectory(sourceFolderPath);
47             Directory.CreateDirectory(targetFolderPath);
48
49             File.WriteAllText(Path.Combine(sourceFolderPath, "a.cs"), "a a a");
50             var aFolderPath = Path.Combine(sourceFolderPath, "A");
51             Directory.CreateDirectory(aFolderPath);
52             Directory.CreateDirectory(Path.Combine(sourceFolderPath, "B"));
53             File.WriteAllText(Path.Combine(aFolderPath, "b.cs"), "b b b");
54             File.WriteAllText(Path.Combine(sourceFolderPath, "x.txt"), "should not be
55             translated");
56
57             fileTransformer.Transform(sourceFolderPath,
58                 $"{targetFolderPath}{Path.DirectorySeparatorChar}");
59
60             var aCppFile = Path.Combine(targetFolderPath, "a.cpp");
61             Assert.True(File.Exists(aCppFile));

```

```

58     Assert.Equal("c c c", File.ReadAllText(aCppFile));
59     Assert.True(Directory.Exists(Path.Combine(targetFolderPath, "A")));
60     Assert.False(Directory.Exists(Path.Combine(targetFolderPath, "B")));
61     var bCppFile = Path.Combine(targetFolderPath, "A", "b.cpp");
62     Assert.True(File.Exists(bCppFile));
63     Assert.Equal("c c c", File.ReadAllText(bCppFile));
64     Assert.False(File.Exists(Path.Combine(targetFolderPath, "x.txt")));
65     Assert.False(File.Exists(Path.Combine(targetFolderPath, "x.cpp")));
66
67     Directory.Delete(sourceFolderPath, true);
68     Directory.Delete(targetFolderPath, true);
69 }
70 }
71 }
```

1.17 ./csharp/Platform.RegularExpressions.Transformer.Tests/MarkovAlgorithmsTests.cs

```

1  using System.Text.RegularExpressions;
2  using Xunit;
3
4  namespace Platform.RegularExpressions.Transformer.Tests
5  {
6      /// <summary>
7      /// <para>
8      /// Represents the markov algorithms tests.
9      /// </para>
10     /// <para></para>
11     /// </summary>
12     public class MarkovAlgorithmsTests
13     {
14         /// <remarks>
15         /// Example is from https://en.wikipedia.org/wiki/Markov_algorithm.
16         /// </remarks>
17         [Fact]
18         public void BinaryToUnaryNumbersTest()
19         {
20             var rules = new SubstitutionRule[]
21             {
22                 ("1", "0|", int.MaxValue), // "1" -> "0|" repeated forever
23                 // | symbol should be escaped for regular expression pattern, but not in the
24                 // → substitution pattern
25                 (@"\|0", "0||", int.MaxValue), // "\|0" -> "0||" repeated forever
26                 ("0", "", int.MaxValue), // "0" -> "" repeated forever
27             };
28             var transformer = new TextTransformer(rules);
29             var input = "101";
30             var expectedOutput = "|||||";
31             var output = transformer.Transform(input);
32             Assert.Equal(expectedOutput, output);
33         }
34     }
35 }
```

1.18 ./csharp/Platform.RegularExpressions.Transformer.Tests/SubstitutionRuleTests.cs

```

1  using System.Text.RegularExpressions;
2  using Xunit;
3
4  namespace Platform.RegularExpressions.Transformer.Tests
5  {
6      /// <summary>
7      /// <para>
8      /// Represents the substitution rule tests.
9      /// </para>
10     /// <para></para>
11     /// </summary>
12     public class SubstitutionRuleTests
13     {
14         /// <summary>
15         /// <para>
16         /// Tests that options override test.
17         /// </para>
18         /// <para></para>
19         /// </summary>
20         [Fact]
21         public void OptionsOverrideTest()
22         {
23             SubstitutionRule rule = (new Regex(@"\s*\#pragma[\sa-zA-Z0-9\/*]+$"), "", 0);
24             Assert.Equal(RegexOptions.Compiled | RegexOptions.Multiline,
25                         rule.MatchPattern.Options);
26         }
27     }
28 }
```

```
25     }
26 }
27 }
```

1.19 ./csharp/Platform.RegularExpressions.Transformer.Tests/TextTransformerTests.cs

```
1  using System.IO;
2  using System.Text;
3  using System.Text.RegularExpressions;
4  using Xunit;
5
6 namespace Platform.RegularExpressions.Transformer.Tests
{
7
8     /// <summary>
9     /// <para>
10    /// Represents the text transformer tests.
11    /// </para>
12    /// <para></para>
13    /// </summary>
14    public class TextTransformerTests
15    {
16        /// <summary>
17        /// <para>
18        /// Tests that debug output test.
19        /// </para>
20        /// <para></para>
21        /// </summary>
22        [Fact]
23        public void DebugOutputTest()
24        {
25            var sourceText = "aaaa";
26            var firstStepReferenceText = "bbbb";
27            var secondStepReferenceText = "cccc";
28
29            var transformer = new TextTransformer(new SubstitutionRule[] {
30                (new Regex("a"), "b"),
31                (new Regex("b"), "c")
32            });
33
34            var steps = transformer.GetSteps(sourceText);
35
36            Assert.Equal(2, steps.Count);
37            Assert.Equal(firstStepReferenceText, steps[0]);
38            Assert.Equal(secondStepReferenceText, steps[1]);
39        }
40
41        /// <summary>
42        /// <para>
43        /// Tests that debug files output test.
44        /// </para>
45        /// <para></para>
46        /// </summary>
47        [Fact]
48        public void DebugFilesOutputTest()
49        {
50            var sourceText = "aaaa";
51            var firstStepReferenceText = "bbbb";
52            var secondStepReferenceText = "cccc";
53
54            var transformer = new TextTransformer(new SubstitutionRule[] {
55                (new Regex("a"), "b"),
56                (new Regex("b"), "c")
57            });
58
59            var targetFilename = Path.GetTempFileName();
60
61            transformer.WriteStepsToFiles(sourceText, $"{targetFilename}.txt",
62                skipFilesWithNoChanges: false);
63
64            CheckAndCleanUpTwoRulesFiles(firstStepReferenceText, secondStepReferenceText,
65                transformer, targetFilename);
66        }
67
68        /// <summary>
69        /// <para>
70        /// Checks the and clean up two rules files using the specified first step reference
71        /// text.
72        /// </para>
73        /// <para></para>
74        /// </summary>
```

```

72     /// <param name="firstStepReferenceText">
73     /// <para>The first step reference text.</para>
74     /// <para></para>
75     /// </param>
76     /// <param name="secondStepReferenceText">
77     /// <para>The second step reference text.</para>
78     /// <para></para>
79     /// </param>
80     /// <param name="transformer">
81     /// <para>The transformer.</para>
82     /// <para></para>
83     /// </param>
84     /// <param name="targetFilename">
85     /// <para>The target filename.</para>
86     /// <para></para>
87     /// </param>
88     private static void CheckAndCleanUpTwoRulesFiles(string firstStepReferenceText, string
89         → secondStepReferenceText, TextTransformer transformer, string targetFilename)
90     {
91         var firstStepReferenceFilename = $"{targetFilename}.0.txt";
92         var firstStepRuleFilename = $"{targetFilename}.0.rule.txt";
93         var secondStepReferenceFilename = $"{targetFilename}.1.txt";
94         var secondStepRuleFilename = $"{targetFilename}.1.rule.txt";
95
96         Assert.True(File.Exists(firstStepReferenceFilename));
97         Assert.True(File.Exists(firstStepRuleFilename));
98         Assert.True(File.Exists(secondStepReferenceFilename));
99         Assert.True(File.Exists(secondStepRuleFilename));
100
101        Assert.Equal(firstStepReferenceText, File.ReadAllText(firstStepReferenceFilename,
102            → Encoding.UTF8));
103        Assert.Equal(transformer.Rules[0].ToString(),
104            → File.ReadAllText(firstStepRuleFilename, Encoding.UTF8));
105        Assert.Equal(secondStepReferenceText, File.ReadAllText(secondStepReferenceFilename,
106            → Encoding.UTF8));
107        Assert.Equal(transformer.Rules[1].ToString(),
108            → File.ReadAllText(secondStepRuleFilename, Encoding.UTF8));
109
110        File.Delete(firstStepReferenceFilename);
111        File.Delete(firstStepRuleFilename);
112        File.Delete(secondStepReferenceFilename);
113        File.Delete(secondStepRuleFilename);
114    }
115
116    /// <summary>
117    /// <para>
118    /// Tests that files with no changes skiped test.
119    /// </para>
120    /// <para></para>
121    /// </summary>
122    [Fact]
123    public void FilesWithNoChangesSkipedTest()
124    {
125        var sourceText = "aaaa";
126        var firstStepReferenceText = "bbbb";
127        var thirdStepReferenceText = "cccc";
128
129        var transformer = new TextTransformer(new SubstitutionRule[] {
130            (new Regex("a"), "b"),
131            (new Regex("x"), "y"),
132            (new Regex("b"), "c")
133        });
134
135        var targetFilename = Path.GetTempFileName();
136
137        transformer.WriteStepsToFiles(sourceText, $"{targetFilename}.txt",
138            → skipFilesWithNoChanges: true);
139
140        CheckAndCleanUpThreeRulesFiles(firstStepReferenceText, thirdStepReferenceText,
141            → transformer, targetFilename);
142    }
143
144    /// <summary>
145    /// <para>
146    /// Checks the and clean up three rules files using the specified first step reference
147    /// → text.
148    /// </para>
149    /// <para></para>

```

```

142     /// </summary>
143     /// <param name="firstStepReferenceText">
144     /// <para>The first step reference text.</para>
145     /// <para></para>
146     /// </param>
147     /// <param name="thirdStepReferenceText">
148     /// <para>The third step reference text.</para>
149     /// <para></para>
150     /// </param>
151     /// <param name="transformer">
152     /// <para>The transformer.</para>
153     /// <para></para>
154     /// </param>
155     /// <param name="targetFilename">
156     /// <para>The target filename.</para>
157     /// <para></para>
158     /// </param>
159     private static void CheckAndCleanUpThreeRulesFiles(string firstStepReferenceText, string
160             → thirdStepReferenceText, TextTransformer transformer, string targetFilename)
161     {
162         var firstStepReferenceFilename = $"'{targetFilename}.0.txt";
163         var firstStepRuleFilename = $"'{targetFilename}.0.rule.txt";
164         var secondStepReferenceFilename = $"'{targetFilename}.1.txt";
165         var secondStepRuleFilename = $"'{targetFilename}.1.rule.txt";
166         var thirdStepReferenceFilename = $"'{targetFilename}.2.txt";
167         var thirdStepRuleFilename = $"'{targetFilename}.2.rule.txt";
168
169         Assert.True(File.Exists(firstStepReferenceFilename));
170         Assert.True(File.Exists(firstStepRuleFilename));
171         Assert.False(File.Exists(secondStepReferenceFilename));
172         Assert.False(File.Exists(secondStepRuleFilename));
173         Assert.True(File.Exists(thirdStepReferenceFilename));
174         Assert.True(File.Exists(thirdStepRuleFilename));
175
176         Assert.Equal(firstStepReferenceText, File.ReadAllText(firstStepReferenceFilename,
177             → Encoding.UTF8));
178         Assert.Equal(transformer.Rules[0].ToString(),
179             → File.ReadAllText(firstStepRuleFilename, Encoding.UTF8));
180         Assert.Equal(thirdStepReferenceText, File.ReadAllText(thirdStepReferenceFilename,
181             → Encoding.UTF8));
182         Assert.Equal(transformer.Rules[2].ToString(),
183             → File.ReadAllText(thirdStepRuleFilename, Encoding.UTF8));
184
185         File.Delete(firstStepReferenceFilename);
186         File.Delete(firstStepRuleFilename);
187         File.Delete(secondStepReferenceFilename);
188         File.Delete(secondStepRuleFilename);
189         File.Delete(thirdStepReferenceFilename);
190         File.Delete(thirdStepRuleFilename);
191     }
192
193     /// <summary>
194     /// <para>
195     /// Tests that debug output using transformers generation test.
196     /// </para>
197     /// <para></para>
198     /// </summary>
199     [Fact]
200     public void DebugOutputUsingTransformersGenerationTest()
201     {
202         var sourceText = "aaaa";
203         var firstStepReferenceText = "bbbb";
204         var secondStepReferenceText = "cccc";
205
206         var transformer = new TextTransformer(new SubstitutionRule[] {
207             (new Regex("a"), "b"),
208             (new Regex("b"), "c")
209         });
210
211         var steps =
212             → transformer.GenerateTransformersForEachRule().TransformWithAll(sourceText);
213
214         Assert.Equal(2, steps.Count);
215         Assert.Equal(firstStepReferenceText, steps[0]);
216         Assert.Equal(secondStepReferenceText, steps[1]);
217     }
218
219     /// <summary>

```

```

214     /// <para>
215     /// Tests that debug files output using transformers generation test.
216     /// </para>
217     /// <para></para>
218     /// </summary>
219     [Fact]
220     public void DebugFilesOutputUsingTransformersGenerationTest()
221     {
222         var sourceText = "aaaa";
223         var firstStepReferenceText = "bbbb";
224         var secondStepReferenceText = "cccc";
225
226         var transformer = new TextTransformer(new SubstitutionRule[] {
227             (new Regex("a"), "b"),
228             (new Regex("b"), "c")
229         });
230
231         var targetFilename = Path.GetTempFileName();
232
233         transformer.GenerateTransformersForEachRule().TransformWithAllToFiles(sourceText,
234             $"'{targetFilename}.txt", skipFilesWithNoChanges: false);
235
236         CheckAndCleanUpTwoRulesFiles(firstStepReferenceText, secondStepReferenceText,
237             transformer, targetFilename);
238     }
239
240     /// <summary>
241     /// <para>
242     /// Tests that files with no changes skiped when using transformers generation test.
243     /// </para>
244     /// <para></para>
245     /// </summary>
246     [Fact]
247     public void FilesWithNoChangesSkippedWhenUsingTransformersGenerationTest()
248     {
249         var sourceText = "aaaa";
250         var firstStepReferenceText = "bbbb";
251         var thirdStepReferenceText = "cccc";
252
253         var transformer = new TextTransformer(new SubstitutionRule[] {
254             (new Regex("a"), "b"),
255             (new Regex("x"), "y"),
256             (new Regex("b"), "c")
257         });
258
259         var targetFilename = Path.GetTempFileName();
260
261         transformer.GenerateTransformersForEachRule().TransformWithAllToFiles(sourceText,
262             $"'{targetFilename}.txt", skipFilesWithNoChanges: true);
263
264         CheckAndCleanUpThreeRulesFiles(firstStepReferenceText, thirdStepReferenceText,
265             transformer, targetFilename);
266     }
267 }

```

Index

./csharp/Platform.RegularExpressions.Transformer.Tests/FileTransformerTests.cs, 24
./csharp/Platform.RegularExpressions.Transformer.Tests/MarkovAlgorithmsTests.cs, 25
./csharp/Platform.RegularExpressions.Transformer.Tests/SubstitutionRuleTests.cs, 25
./csharp/Platform.RegularExpressions.Transformer.Tests/TextTransformerTests.cs, 26
./csharp/Platform.RegularExpressions.Transformer/FileTransformer.cs, 1
./csharp/Platform.RegularExpressions.Transformer/IFileTransformer.cs, 6
./csharp/Platform.RegularExpressions.Transformer/ISubstitutionRule.cs, 7
./csharp/Platform.RegularExpressions.Transformer/ITextTransformer.cs, 8
./csharp/Platform.RegularExpressions.Transformer/ITextTransformerExtensions.cs, 8
./csharp/Platform.RegularExpressions.Transformer/ITextTransformersListExtensions.cs, 10
./csharp/Platform.RegularExpressions.Transformer/ITransformer.cs, 11
./csharp/Platform.RegularExpressions.Transformer/LoggingFileTransformer.cs, 12
./csharp/Platform.RegularExpressions.Transformer/RegexExtensions.cs, 12
./csharp/Platform.RegularExpressions.Transformer/Steps.cs, 13
./csharp/Platform.RegularExpressions.Transformer/StringExtensions.cs, 14
./csharp/Platform.RegularExpressions.Transformer/SubstitutionRule.cs, 15
./csharp/Platform.RegularExpressions.Transformer/TextSteppedTransformer.cs, 19
./csharp/Platform.RegularExpressions.Transformer/TextTransformer.cs, 22
./csharp/Platform.RegularExpressions.Transformer/TransformerCLI.cs, 23