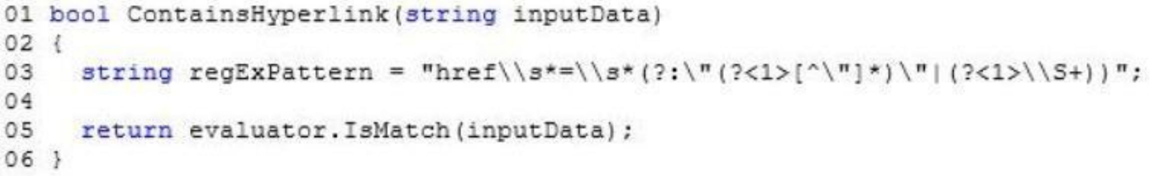
Vendor: Microsoft

Exam Code: 70-483

Exam Name: Microsoft Programming in C#

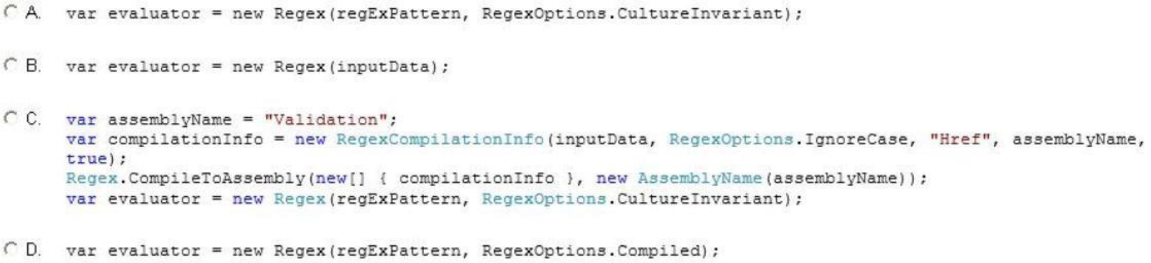
Questions and Answers No.: 31-40 (231Q&As)

QUESTION 31
You are developing a C# application that has a requirement to validate some string input data by using the Regex class.
The application includes a method named ContainsHyperlink.
The ContainsHyperlink() method will verify the presence of a URI and surrounding markup.
The following code segment defines the ContainsHyperlink() method. (Line numbers are included for reference only.)



```
01 bool ContainsHyperlink(string inputData)
02 {
03   string regExPattern = "href\\s*=\\s*(?:\"(?<1>[^\"]*)\"|(?<1>\\S+))";
04
05   return evaluator.IsMatch(inputData);
06 }
```

The expression patterns used for each validation function are constant.
You need to ensure that the expression syntax is evaluated only once when the Regex object is initially instantiated.
Which code segment should you insert at line 04?



○ A.
```
var evaluator = new Regex(regExPattern, RegexOptions.CultureInvariant);
```

○ B.
```
var evaluator = new Regex(inputData);
```

○ C.
```
var assemblyName = "Validation";
var compilationInfo = new RegexCompilationInfo(inputData, RegexOptions.IgnoreCase, "Href", assemblyName,
true);
Regex.CompileToAssembly(new[] { compilationInfo }, new AssemblyName(assemblyName));
var evaluator = new Regex(regExPattern, RegexOptions.CultureInvariant);
```

○ D.
```
var evaluator = new Regex(regExPattern, RegexOptions.Compiled);
```

A. Option A
B. Option B
C. Option C
D. Option D

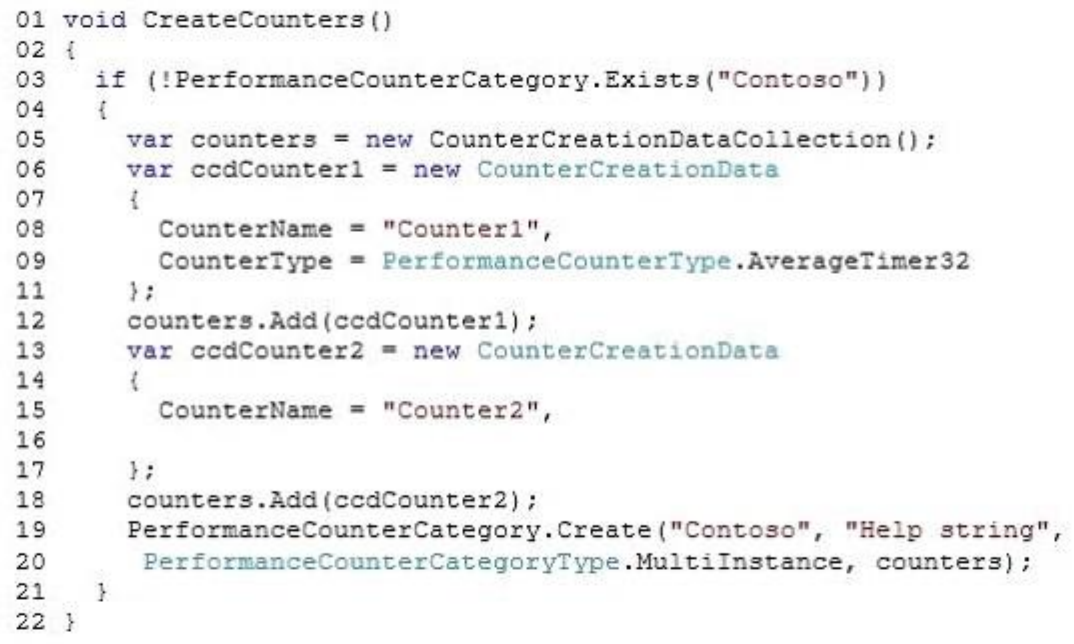
Answer: D

QUESTION 32
You are developing an application by using C#.
You have the following requirements:
- Support 32-bit and 64-bit system configurations.
- Include pre-processor directives that are specific to the system configuration.
- Deploy an application version that includes both system configurations to testers.
- Ensure that stack traces include accurate line numbers.
You need to configure the project to avoid changing individual configuration settings every time you deploy the application to testers.
Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Update the platform target and conditional compilation symbols for each application configuration.
B. Create two application configurations based on the default Release configuration.
C. Optimize the application through address rebasing in the 64-bit configuration.
D. Create two application configurations based on the default Debug configuration.

Answer: BD

QUESTION 33
You are developing a method named CreateCounters that will create performance counters for an application.
The method includes the following code. (Line numbers are included for reference only.)
You need to ensure that Counter2 is available for use in Windows Performance Monitor (PerfMon).
Which code segment should you insert at line 16?



```
01 void CreateCounters()
02 {
03   if (!PerformanceCounterCategory.Exists("Contoso"))
04   {
05     var counters = new CounterCreationDataCollection();
06     var ccdCounter1 = new CounterCreationData
07     {
08       CounterName = "Counter1",
09       CounterType = PerformanceCounterType.AverageTimer32
11     };
12     counters.Add(ccdCounter1);
13     var ccdCounter2 = new CounterCreationData
14     {
15       CounterName = "Counter2",
16
17     };
18     counters.Add(ccdCounter2);
19     PerformanceCounterCategory.Create("Contoso", "Help string",
20      PerformanceCounterCategoryType.MultiInstance, counters);
21   }
22 }
```

A. `CounterType = PerformanccCounterType.RawBase`
B. `CounterType = PerformanceCounterType.AverageBase`
C. `CounterType = PerformanceCounterType.SampleBase`
D. `CounterType = PerformanceCounterType.CounterMultiBase`

Answer: C

QUESTION 34
You are developing an application that will transmit large amounts of data between a client computer and a server.
You need to ensure the validity of the data by using a cryptographic hashing algorithm.
Which algorithm should you use?

A. HMACSHA256
B. RNGCryptoServiceProvider
C. DES
D. Aes

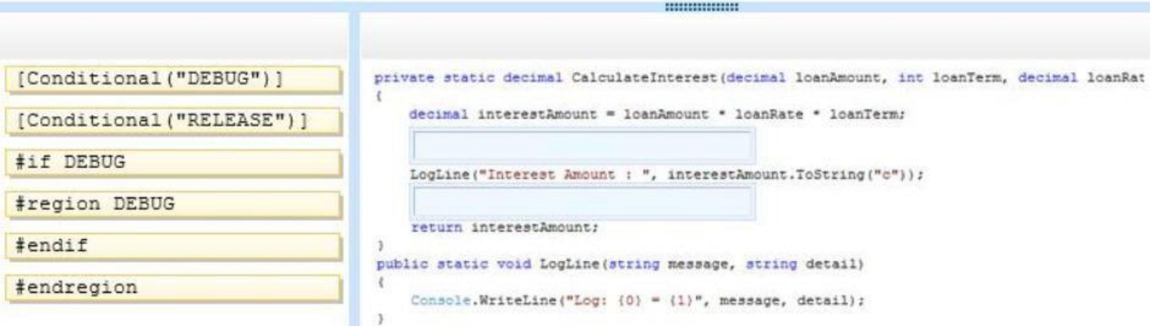
Answer: A

QUESTION 35

Drag and Drop Question
You are testing an application.
The application includes methods named Calculatelnterest and LogLine.
The Calculatelnterest () method calculates loan interest.
The Logl_ine() method sends diagnostic messages to a console window.
You have the following requirements:

```
- The Calculatelnterest() method must run for all build configurations.
- Logl_ine() method must run only for debug builds.
```

You need to ensure that the methods run correctly.
How should you complete the relevant code? (To answer, drag the appropriate code segments to the correct locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)



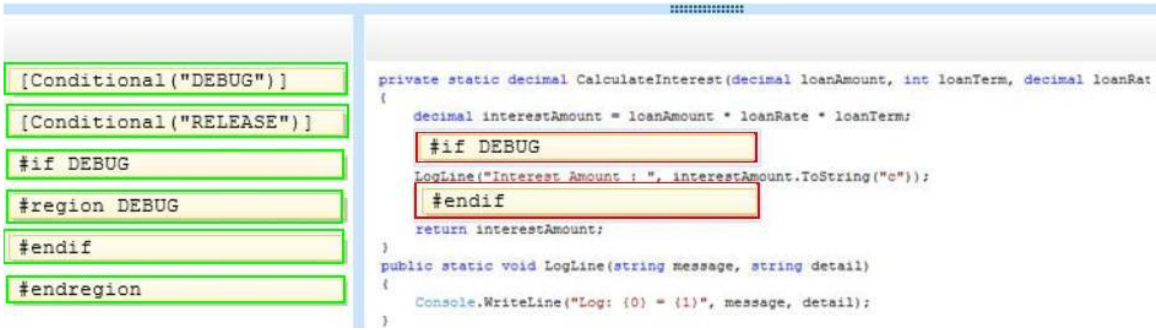
```
[Conditional("DEBUG")]
[Conditional("RELEASE")]
#if DEBUG
#region DEBUG
#endif
#endregion
```

```
private static decimal CalculateInterest(decimal loanAmount, int loanTerm, decimal loanRat
{
    decimal interestAmount = loanAmount * loanRate * loanTerm;

    LogLine("Interest Amount : ", interestAmount.ToString("c"));

    return interestAmount;
}
public static void LogLine(string message, string detail)
{
    Console.WriteLine("Log: {0} = {1}", message, detail);
}
```

Answer:



```
[Conditional("DEBUG")]
[Conditional("RELEASE")]
#if DEBUG
#region DEBUG
#endif
#endregion
```

```
private static decimal CalculateInterest(decimal loanAmount, int loanTerm, decimal loanRat
{
    decimal interestAmount = loanAmount * loanRate * loanTerm;
    #if DEBUG
    LogLine("Interest Amount : ", interestAmount.ToString("c"));
    #endif
    return interestAmount;
}
public static void LogLine(string message, string detail)
{
    Console.WriteLine("Log: {0} = {1}", message, detail);
}
```

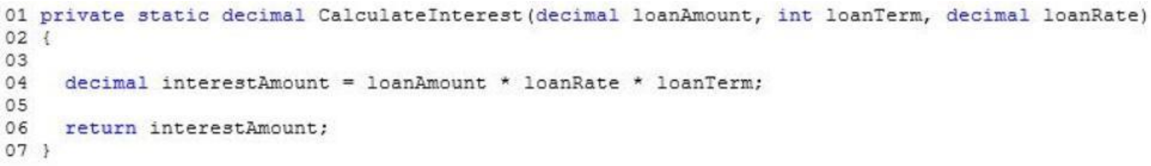
QUESTION 36
You are developing an assembly that will be used by multiple applications.
You need to install the assembly in the Global Assembly Cache (GAC).
Which two actions can you perform to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Use the Assembly Registration tool (regasm.exe) to register the assembly and to copy the assembly to the GAC.
B. Use the Strong Name tool (sn.exe) to copy the assembly into the GAC.
C. Use Microsoft Register Server (regsvr32.exe) to add the assembly to the GAC.
D. Use the Global Assembly Cache tool (gacutil.exe) to add the assembly to the GAC.
E. Use Windows Installer 2.0 to add the assembly to the GAC.

Answer: BD

QUESTION 37
You are debugging an application that calculates loan interest.
The application includes the following code. (Line numbers are included for reference only.)

You need to ensure that the debugger breaks execution within the CalculateInterest() method when the loanAmount variable is less than or equal to zero in all builds of the application.
What should you do?



```
01 private static decimal CalculateInterest(decimal loanAmount, int loanTerm, decimal loanRate)
02 {
03
04   decimal interestAmount = loanAmount * loanRate * loanTerm;
05
06   return interestAmount;
07 }
```

A. Insert the following code segment at line 03:
   `Trace.Assert(loanAmount > 0);`
B. Insert the following code segment at line 03:
   `Debug.Assert(loanAmount > 0);`
C. Insert the following code segment at line 05:
   `Debug.Write(loanAmount > 0);`
D. Insert the following code segment at line 05:
   `Trace.Write(loanAmount > 0);`

Answer: A

QUESTION 38
You are developing an application by using C#.
You provide a public key to the development team during development.
You need to specify that the assembly is not fully signed when it is built.
Which two assembly attributes should you include in the source code? (Each correct answer presents part of the solution. Choose two.)

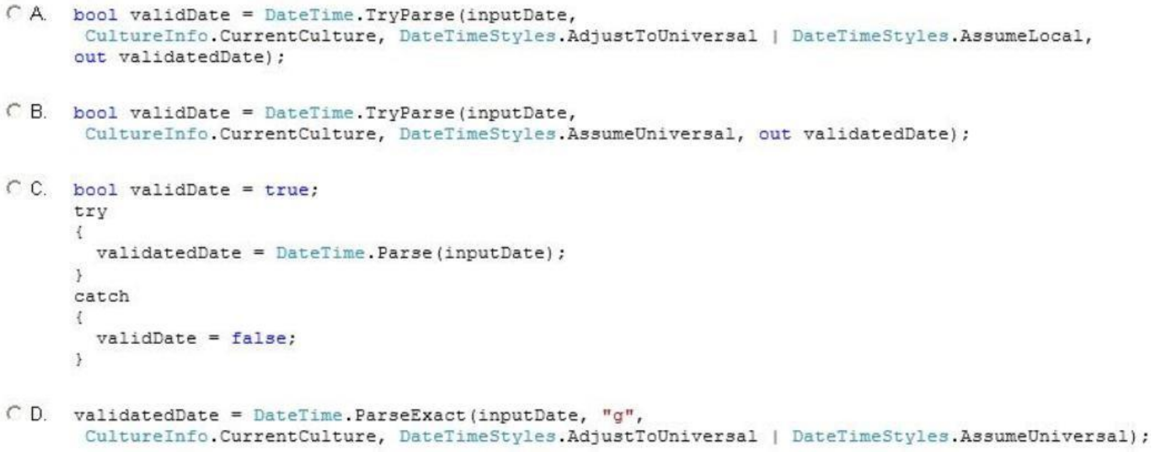
A. AssemblyKeyNameAttribute
B. ObfuscateAssemblyAttribute
C. AssemblyDelaySignAttribute
D. AssemblyKeyFileAttribute

Answer: CD
Explanation:
- AssemblyDelaySignAttribute
Specifies that the assembly is not fully signed when created.
- The following code example shows the use of the AssemblyDelaySignAttribute attribute with the AssemblyKeyFileAttribute.

```
using System;
using System.Reflection;
[assembly:AssemblyKeyFileAttribute("TestPublicKey.snk")]
[assembly:AssemblyDelaySignAttribute(true)]
namespace DelaySign
{
public class Test { }
}
```

QUESTION 39
You are developing an application that accepts the input of dates from the user.
Users enter the date in their local format.
The date entered by the user is stored in a string variable named inputDate.
The valid date value must be placed in a DateTime variable named validatedDate.
You need to validate the entered date and convert it to Coordinated Universal Time (UTC).

The code must not cause an exception to be thrown.
Which code segment should you use?



○ A.
```
bool validDate = DateTime.TryParse(inputDate,
 CultureInfo.CurrentCulture, DateTimeStyles.AdjustToUniversal | DateTimeStyles.AssumeLocal,
out validatedDate);
```

○ B.
```
bool validDate = DateTime.TryParse(inputDate,
 CultureInfo.CurrentCulture, DateTimeStyles.AssumeUniversal, out validatedDate);
```

○ C.
```
bool validDate = true;
try
{
  validatedDate = DateTime.Parse(inputDate);
}
catch
{
  validDate = false;
}
```

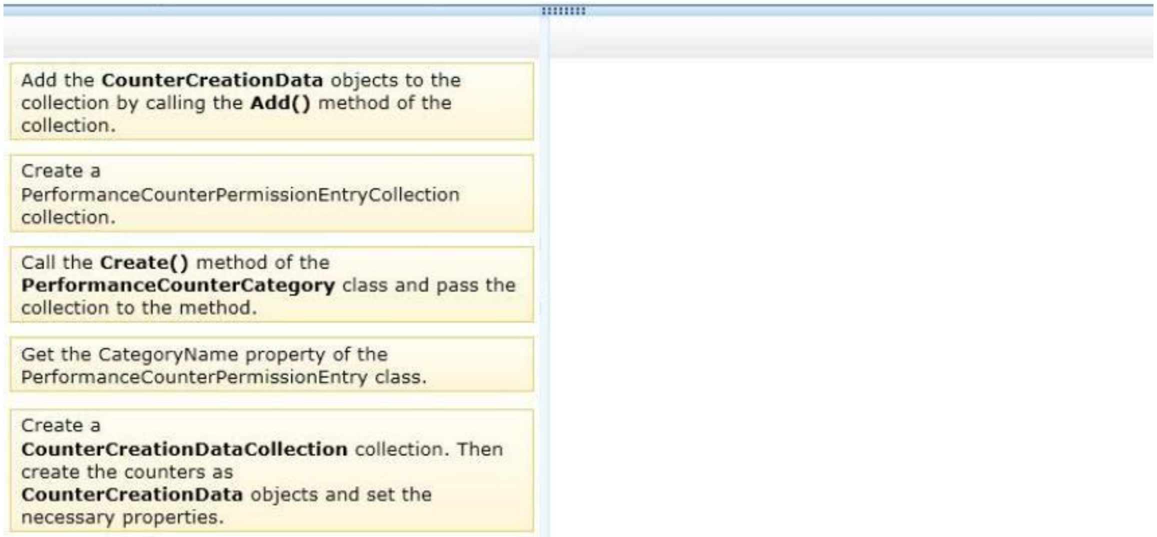
○ D.
```
validatedDate = DateTime.ParseExact(inputDate, "g",
 CultureInfo.CurrentCulture, DateTimeStyles.AdjustToUniversal | DateTimeStyles.AssumeUniversal);
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

Explanation:
AdjustToUniversal parses s and, if necessary, converts it to UTC.
Note: The DateTime.TryParse method converts the specified string representation of a date and time to its DateTime equivalent using the specified culture-specific format information and formatting style, and returns a value that indicates whether the conversion succeeded.

QUESTION 40
Drag and Drop Question
You are developing an application by using C#.
The application will process several objects per second.
You need to create a performance counter to analyze the object processing.
Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



Add the **CounterCreationData** objects to the collection by calling the **Add()** method of the collection.

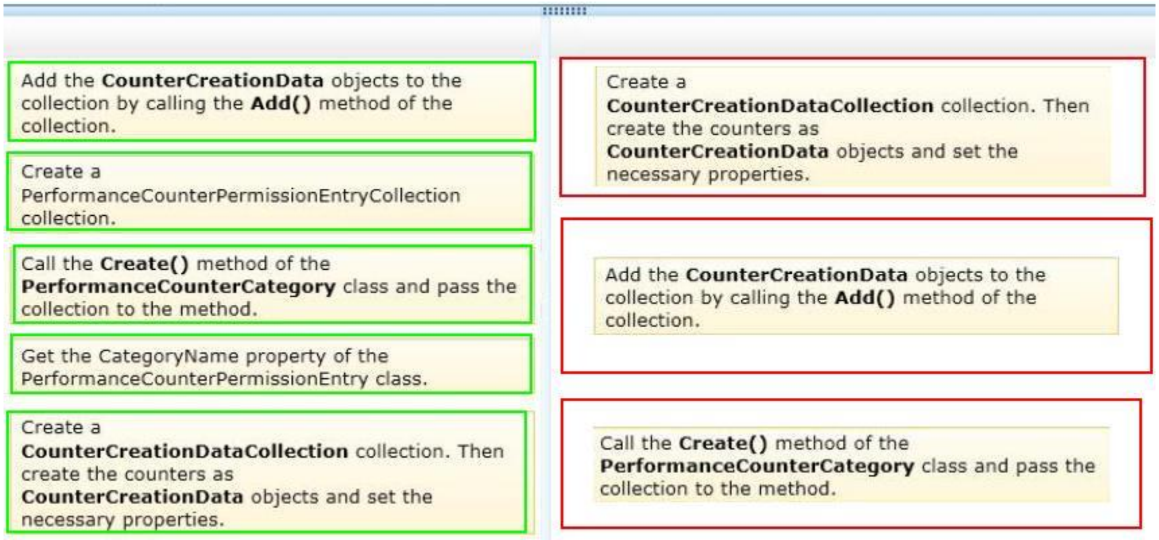
Create a PerformanceCounterPermissionEntryCollection collection.

Call the **Create()** method of the **PerformanceCounterCategory** class and pass the collection to the method.

Get the CategoryName property of the PerformanceCounterPermissionEntry class.

Create a **CounterCreationDataCollection** collection. Then create the counters as **CounterCreationData** objects and set the necessary properties.

Answer:



Add the **CounterCreationData** objects to the collection by calling the **Add()** method of the collection.

Create a PerformanceCounterPermissionEntryCollection collection.

Call the **Create()** method of the **PerformanceCounterCategory** class and pass the collection to the method.

Get the CategoryName property of the PerformanceCounterPermissionEntry class.

Create a **CounterCreationDataCollection** collection. Then create the counters as **CounterCreationData** objects and set the necessary properties.

Create a **CounterCreationDataCollection** collection. Then create the counters as **CounterCreationData** objects and set the necessary properties.

Add the **CounterCreationData** objects to the collection by calling the **Add()** method of the collection.

Call the **Create()** method of the **PerformanceCounterCategory** class and pass the collection to the method.