Vendor: Microsoft

Exam Code: 70-483

Exam Name: Microsoft Programming in C#

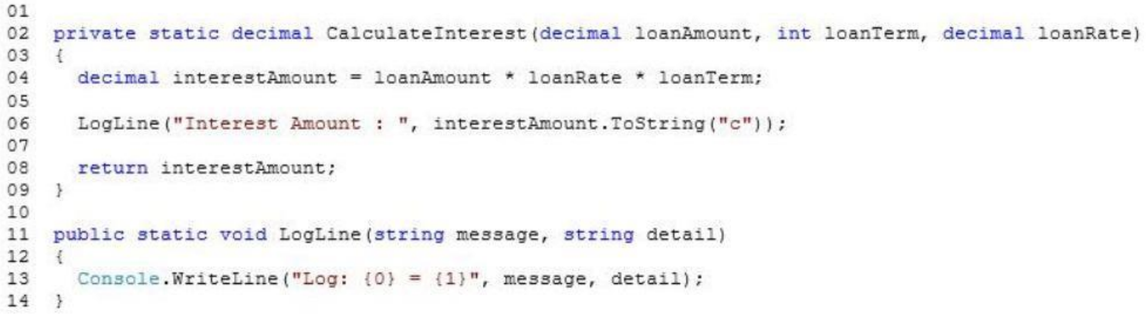
Questions and Answers No.: 61-70 (231Q&As)

QUESTION 61
You are developing an application that includes a class named Order.
The application will store a collection of Order objects.
The collection must meet the following requirements:
- Internally store a key and a value for each collection item.
- Provide objects to Iterators in ascending order based on the key.
- Ensure that item are accessible by zero-based index or by key.
You need to use a collection type that meets the requirements.
Which collection type should you use?

A. LinkedList
B. Queue
C. Array
D. HashTable
E. SortedList

Answer: E
Explanation:
http://msdn.microsoft.com/en-us/library/system.collections.sortedlist.aspx

QUESTION 62
You are testing an application.
The application includes methods named CalculateInterest aid LogLine.
The CalculateInterest () method calculates loan interest.
The Logl_ine() method sends diagnostic messages to a console window.
The following code implements the methods. (Line numbers are included for reference only.)
You have the following requirements:
- The Calculatelnterest() method must run for all build configurations.
- The LogLine() method must run only for debug builds.
You need to ensure that the methods run correctly.
What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)



```
01
02  private static decimal CalculateInterest(decimal loanAmount, int loanTerm, decimal loanRate)
03  {
04    decimal interestAmount = loanAmount * loanRate * loanTerm;
05
06    LogLine("Interest Amount : ", interestAmount.ToString("c"));
07
08    return interestAmount;
09  }
10
11  public static void LogLine(string message, string detail)
12  {
13    Console.WriteLine("Log: {0} = {1}", message, detail);
14  }
```

A. Insert the following code segment at line 01: #region DEBUG
Insert the following code segment at line 10: #endregion
B. Insert the following code segment at line 10: [Conditional(MDEBUG")]
C. Insert the following code segment at line 05: #region DEBUG
Insert the following code segment at line 07: #endregion
D. Insert the following code segment at line 01: #if DE30G
Insert the following code segment at line 10: #endif
E. Insert the following code segment at line 01: [Conditional(MDEBUG")]
F. Insert the following code segment at line 05: #if DEBUG

Insert the following code segment at line 07: `#endif`

G. Insert the following code segment at line 10: `[Conditional("RELEASE")]`

Answer: BF

QUESTION 63

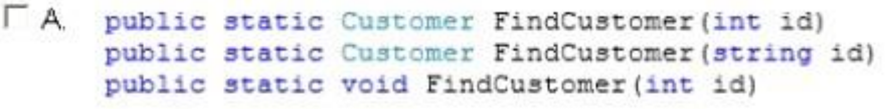
You are creating a console application by using C#.
You need to access the application assembly.
Which code segment should you use?

A. `Assembly.GetAssembly(this);`
B. `This.GetType();`
C. `Assembly.Load ();`
D. `Assembly.GetExecutingAssembly ();`

Answer: D

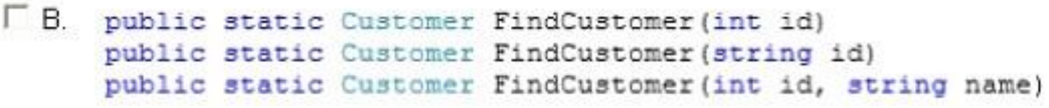
QUESTION 64

You are developing an application that will manage customer records.
The application includes a method named FindCustomer.
Users must be able to locate customer records by using the customer identifier or customer name.
You need to implement the FindCustomer() method to meet the requirement.
Which two sets of method signatures can you use to achieve this goal? (Each correct answer presents a complete solution. Choose two.)



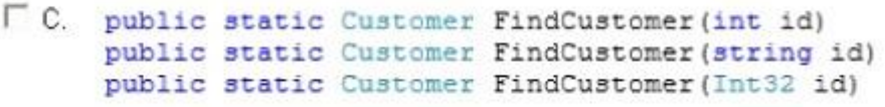
☐ A.

```
public static Customer FindCustomer(int id)
public static Customer FindCustomer(string id)
public static void FindCustomer(int id)
```



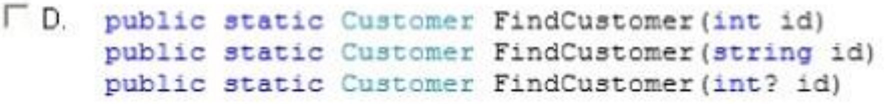
☐ B.

```
public static Customer FindCustomer(int id)
public static Customer FindCustomer(string id)
public static Customer FindCustomer(int id, string name)
```



☐ C.

```
public static Customer FindCustomer(int id)
public static Customer FindCustomer(string id)
public static Customer FindCustomer(Int32 id)
```



☐ D.

```
public static Customer FindCustomer(int id)
public static Customer FindCustomer(string id)
public static Customer FindCustomer(int? id)
```

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

Answer: BD

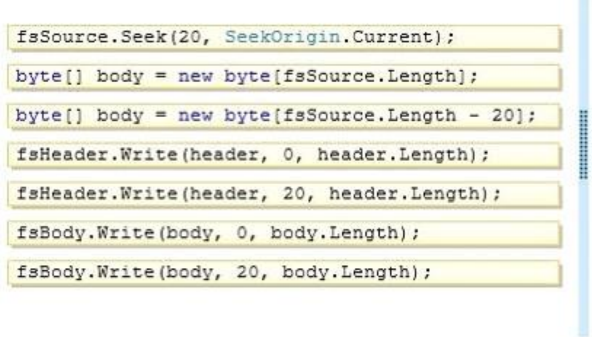
QUESTION 65

You need to write a method that combines an unknown number of strings.
The solution must minimize the amount of memory used by the method when the method executes.
What should you include in the code?

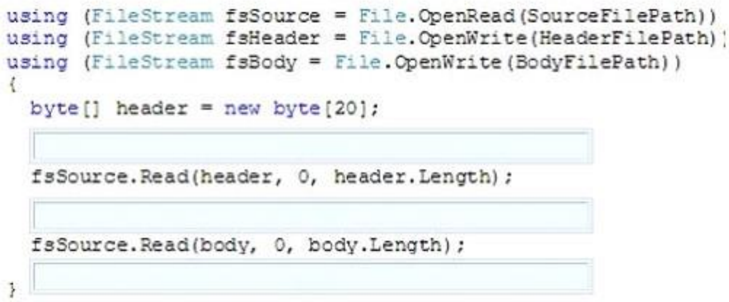
A. The String.Concat method
B. The StringBuilder.Append method
C. The + operator
D. The += operator

Answer: A
Explanation:
A: String.Concat Method
Concatenates one or more instances of String, or the String representations of the values of one or more instances of Object.

QUESTION 66
Drag and Drop Question
You are creating a method that will split a single input file into two smaller output files.
The method must perform the following actions:
```
- Create a file named header.dat that contains the first 20 bytes of
the input file.
- Create a file named body.dat that contains the remainder of the input
file.
```
You need to create the method.
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.)

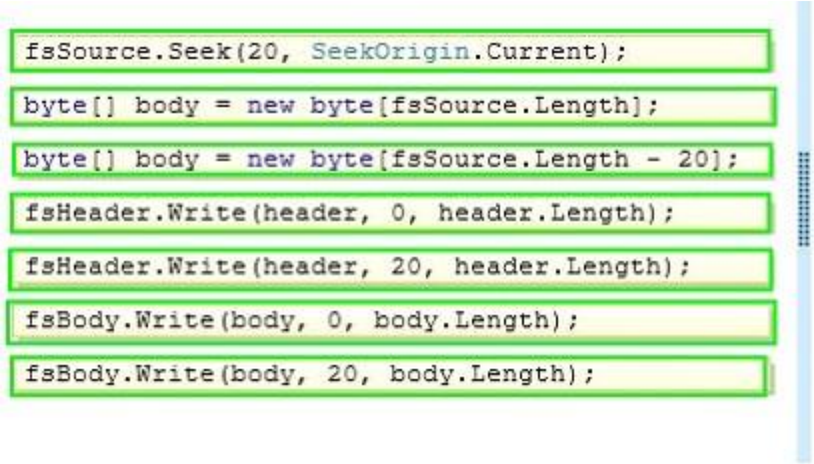


```
fsSource.Seek(20, SeekOrigin.Current);
byte[] body = new byte[fsSource.Length];
byte[] body = new byte[fsSource.Length - 20];
fsHeader.Write(header, 0, header.Length);
fsHeader.Write(header, 20, header.Length);
fsBody.Write(body, 0, body.Length);
fsBody.Write(body, 20, body.Length);
```

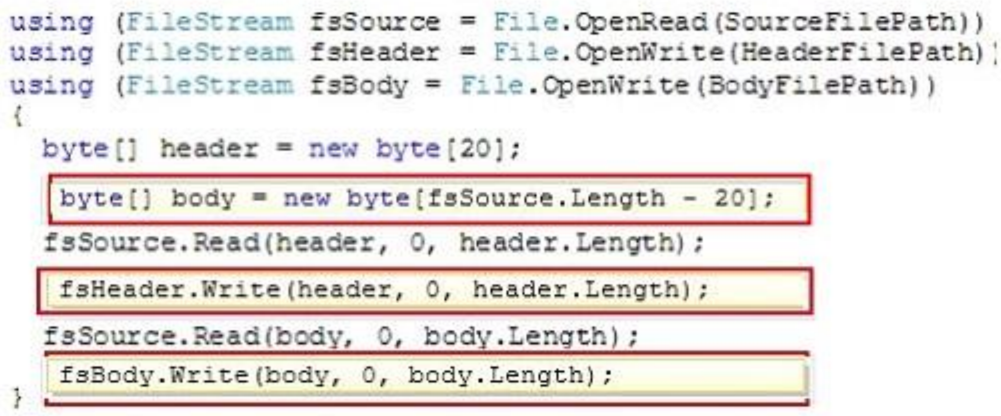


```
using (FileStream fsSource = File.OpenRead(SourceFilePath))
using (FileStream fsHeader = File.OpenWrite(HeaderFilePath))
using (FileStream fsBody = File.OpenWrite(BodyFilePath))
{
  byte[] header = new byte[20];
  
  fsSource.Read(header, 0, header.Length);
  
  fsSource.Read(body, 0, body.Length);
  
}
```

Answer:



```
fsSource.Seek(20, SeekOrigin.Current);
byte[] body = new byte[fsSource.Length];
byte[] body = new byte[fsSource.Length - 20];
fsHeader.Write(header, 0, header.Length);
fsHeader.Write(header, 20, header.Length);
fsBody.Write(body, 0, body.Length);
fsBody.Write(body, 20, body.Length);
```



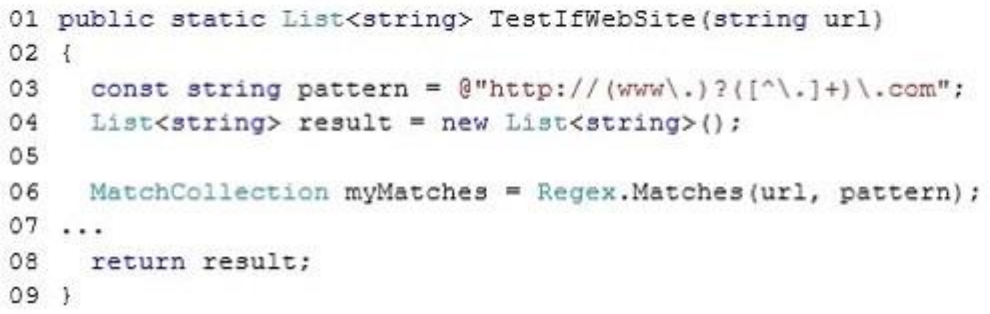
```
using (FileStream fsSource = File.OpenRead(SourceFilePath))
using (FileStream fsHeader = File.OpenWrite(HeaderFilePath))
using (FileStream fsBody = File.OpenWrite(BodyFilePath))
{
   byte[] header = new byte[20];
    byte[] body = new byte[fsSource.Length - 20];
   fsSource.Read(header, 0, header.Length);
    fsHeader.Write(header, 0, header.Length);
   fsSource.Read(body, 0, body.Length);
    fsBody.Write(body, 0, body.Length);
}
```

QUESTION 67
You are developing a class named Account that will be used by several applications.
The applications that will consume the Account class will make asynchronous calls to the Account class to execute several different methods.
You need to ensure that only one call to the methods is executed at a time.
Which keyword should you use?

A. sealed
B. protected
C. checked
D. lock

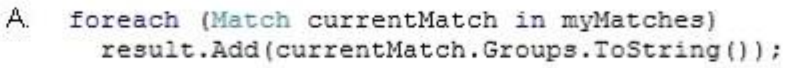
Answer: D

QUESTION 68
You write the following method (line numbers are included for reference only):

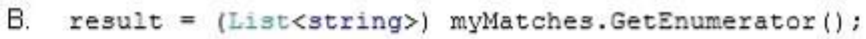


```
01 public static List<string> TestIfWebSite(string url)
02 {
03   const string pattern = @"http://(www\.)?([^\.]+)\.com";
04   List<string> result = new List<string>();
05
06   MatchCollection myMatches = Regex.Matches(url, pattern);
07 ...
08   return result;
09 }
```

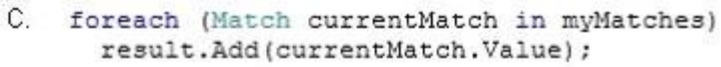
You need to ensure that the method extracts a list of URLs that match the following pattern:
`@http://(www\.)?([^\.]+)\.com;`
Which code should you insert at line 07?



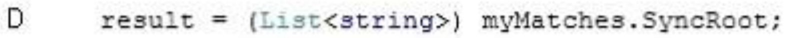
```
A.  foreach (Match currentMatch in myMatches)
      result.Add(currentMatch.Groups.ToString());
```



```
B.  result = (List<string>) myMatches.GetEnumerator();
```



```
C.  foreach (Match currentMatch in myMatches)
      result.Add(currentMatch.Value);
```



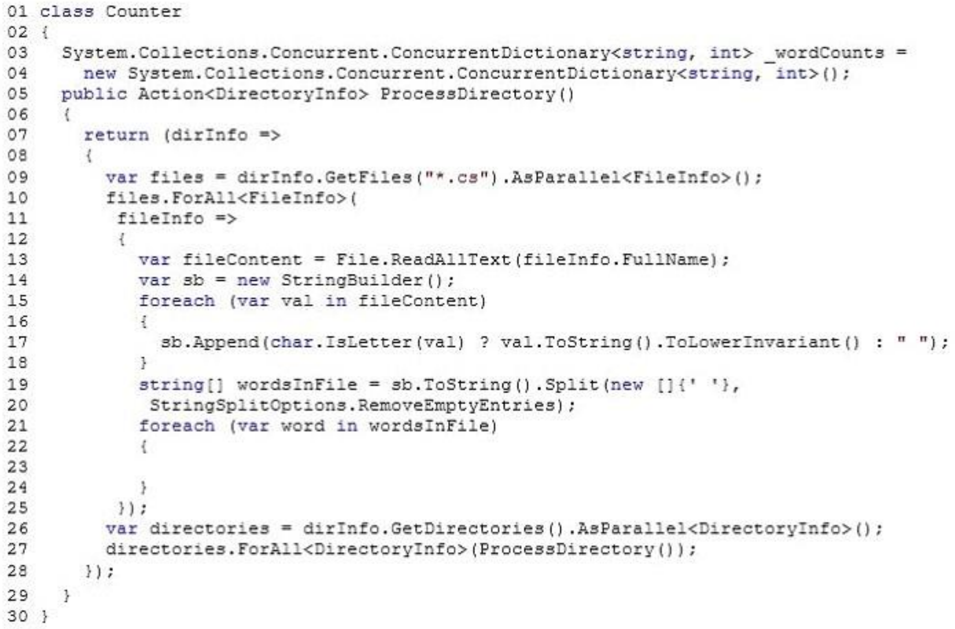
```
D     result = (List<string>) myMatches.SyncRoot;
```

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

Answer: A
Explanation:
- MatchCollection
Represents the set of successful matches found by iteratively applying a regular expression pattern to the input string.
The collection is immutable (read-only) and has no public constructor.
The Regex.Matches method returns a MatchCollection object.
- List<T>.Add Method
Adds an object to the end of the List<T>.
Incorrect:
Not D: ICollection.SyncRoot Property
For collections whose underlying store is not publicly available, the expected implementation is to return the current instance. Note that the pointer to the current instance might not be sufficient for collections that wrap other collections; those should return the underlying collection's SyncRoot property.

QUESTION 69
You develop an application by using C#.

The application counts the number of times a specific word appears within a set of text files. The application includes the following code. (Line numbers are included for reference only.)



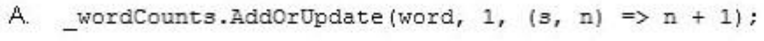
```
01 class Counter
02 {
03   System.Collections.Concurrent.ConcurrentDictionary<string, int> _wordCounts =
04     new System.Collections.Concurrent.ConcurrentDictionary<string, int>();
05   public Action<DirectoryInfo> ProcessDirectory()
06   {
07     return (dirInfo =>
08     {
09       var files = dirInfo.GetFiles("*.cs").AsParallel<FileInfo>();
10       files.ForAll<FileInfo>(
11        fileInfo =>
12        {
13          var fileContent = File.ReadAllText(fileInfo.FullName);
14          var sb = new StringBuilder();
15          foreach (var val in fileContent)
16          {
17            sb.Append(char.IsLetter(val) ? val.ToString().ToLowerInvariant() : " ");
18          }
19          string[] wordsInFile = sb.ToString().Split(new []{' '},
20           StringSplitOptions.RemoveEmptyEntries);
21          foreach (var word in wordsInFile)
22          {
23
24          }
25        });
26       var directories = dirInfo.GetDirectories().AsParallel<DirectoryInfo>();
27       directories.ForAll<DirectoryInfo>(ProcessDirectory());
28     });
29   }
30 }
```

You have the following requirements:

- Populate the _wordCounts object with a list of words and the number of occurrences of each word.
- Ensure that updates to the ConcurrentDictionary object can happen in parallel.

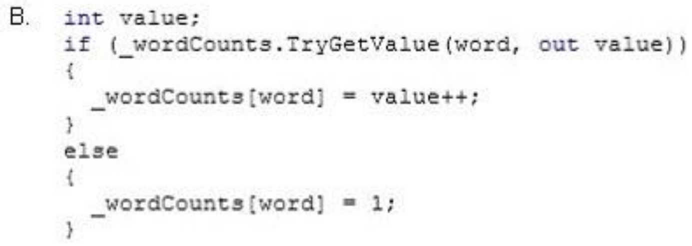
You need to complete the relevant code.

Which code segment should you insert at line 23?



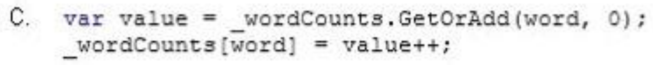
A.

```
_wordCounts.AddOrUpdate(word, 1, (s, n) => n + 1);
```



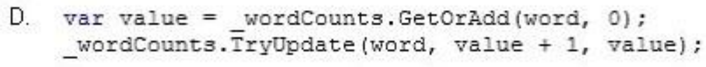
B.

```
int value;
if (_wordCounts.TryGetValue(word, out value))
{
  _wordCounts[word] = value++;
}
else
{
  _wordCounts[word] = 1;
}
```



C.

```
var value = _wordCounts.GetOrAdd(word, 0);
_wordCounts[word] = value++;
```



D.

```
var value = _wordCounts.GetOrAdd(word, 0);
_wordCounts.TryUpdate(word, value + 1, value);
```

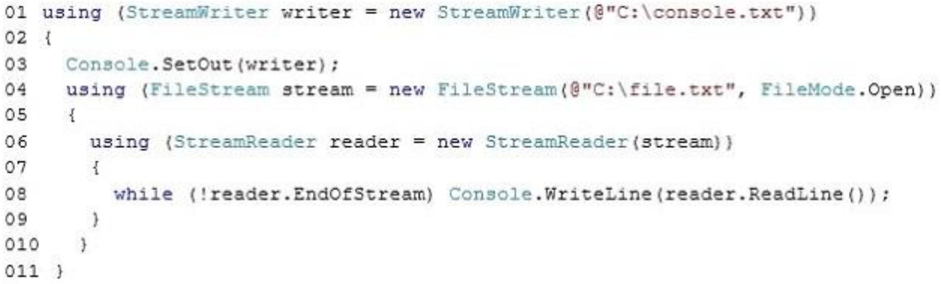
A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

QUESTION 70

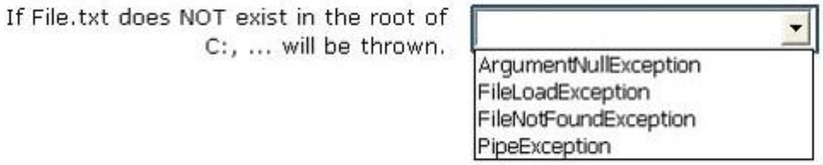
Hotspot Question

You have the following code (line numbers are included for reference only):

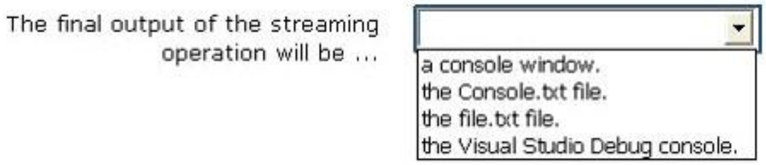


```
using (StreamWriter writer = new StreamWriter(@"C:\console.txt"))
{
  Console.SetOut(writer);
  using (FileStream stream = new FileStream(@"C:\file.txt", FileMode.Open))
  {
    using (StreamReader reader = new StreamReader(stream))
    {
      while (!reader.EndOfStream) Console.WriteLine(reader.ReadLine());
    }
  }
}
```

To answer, complete each statement according to the information presented in the code.

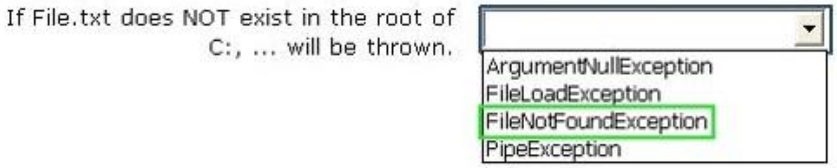


If File.txt does NOT exist in the root of C:, ... will be thrown.

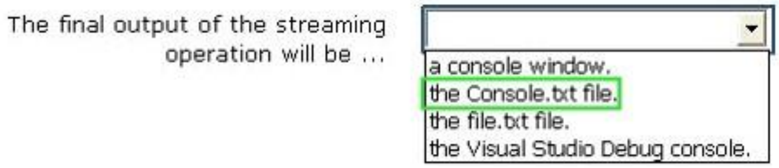


The final output of the streaming operation will be ...

Answer:



If File.txt does NOT exist in the root of C:, ... will be thrown.



The final output of the streaming operation will be ...