# MICROSOFT 70-483 EXAM QUESTIONS & ANSWERS

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File Version: 43.4


**MICROSOFT 70-483 EXAM QUESTIONS & ANSWERS**

**Exam Name: Programming in C#**

**Certkey**

**QUESTION 1**

collection of Order objects.

The collection must meet the following requirements:

-Use strongly typed members.

-Process Order objects in first-in-first-out order.

-Store values for each Order object.

-Use zero-based indices.

You need to use a collection type that meets the requirements.

Which collection type should you use?

A. Queue <T>
B. SortedList
C. LinkedList<T>
D. HashTable
E. Array <T>

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**
Like an E-Mail Program, First In, First Out is representative of a Queue Object

**QUESTION 2**
You are developing an application. The application calls a method that returns an array of integers

named employeeIds. You define an integer variable named employeeIdToRemove and assign a value to it.

You declare an array named filteredEmployeeIds.

You have the following requirements:

-Remove duplicate integers from the employeeIds array.

-Sort the array in order from the highest value to the lowest value.

-Remove the integer value stored in the employeeIdToRemove variable from the employeeIds array.

You need to create a LINQ query to meet the requirements.

Which code segment should you use?

A.
```
int[] filteredEmployeeIds = employeeIds.Where(value => value !=
  employeeIdToRemove).OrderBy(x => x).ToArray();
```

B.
```
int[] filteredEmployeeIds = employeeIds.Where(value => value !=
  employeeIdToRemove).OrderByDescending(x => x).ToArray();
```

C.
```
int[] filteredEmployeeIds = employeeIds.Distinct().Where(value => value !=
  employeeIdToRemove).OrderByDescending(x => x).ToArray();
```

D.
```
int[] filteredEmployeeIds = employeeIds.Distinct().OrderByDescending(x => x).ToArray();
```

A.
B.
C.
D.

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**
C is the only one of the answers that includs the "Distinct" clause in order to eliminate duplicate values.

**QUESTION 3**
You are developing an application that includes the following code segment. (Line numbers are included

for reference only.)

```
01 class Animal
02 {
03   public string Color { get; set; }
04   public string Name { get; set; }
05 }
06 private static IEnumerable<Animal> GetAnimals(string sqlConnectionString)
07 {
08   var animals = new List<Animal>();
09   SqlConnection sqlConnection = new SqlConnection(sqlConnectionString);
10   using (sqlConnection)
11   {
12     SqlCommand sqlCommand = new SqlCommand("SELECT Name, ColorName FROM Animals", sqlConnection);
13
14     using (SqlDataReader sqlDataReader = sqlCommand.ExecuteReader())
15     {
16
17       {
18         var animal = new Animal();
19         animal.Name = (string)sqlDataReader["Name"];
20         animal.Color = (string)sqlDataReader["ColorName"];
21         animals.Add(animal);
22       }
23     }
24   }
25   return customers;
26 }
```

The GetAnimals() method must meet the following requirements:

-Connect to a Microsoft SQL Server database.

-Create Animal objects and populate them with data from the database.

-Return a sequence of populated Animal objects.

You need to meet the requirements.

Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Insert the following code segment at line 16: while (sqlDataReader.NextResult())
B. Insert the following code segment at line 13: sqlConnection.Open();
C. Insert the following code segment at line 13: sqlConnection.BeginTransaction();
D. Insert the following code segment at line 16: while (sqlDataReader.Read())
E. Insert the following code segment at line 16: while (sqlDataReader.GetValues())

**Correct Answer:** BD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 4**
You are developing an application by using C#. The application includes an array of decimal values named loanAmounts.
You are developing a LINQ query to return the values from the array.

The query must return decimal values that are evenly divisible by two. The values must be sorted from the

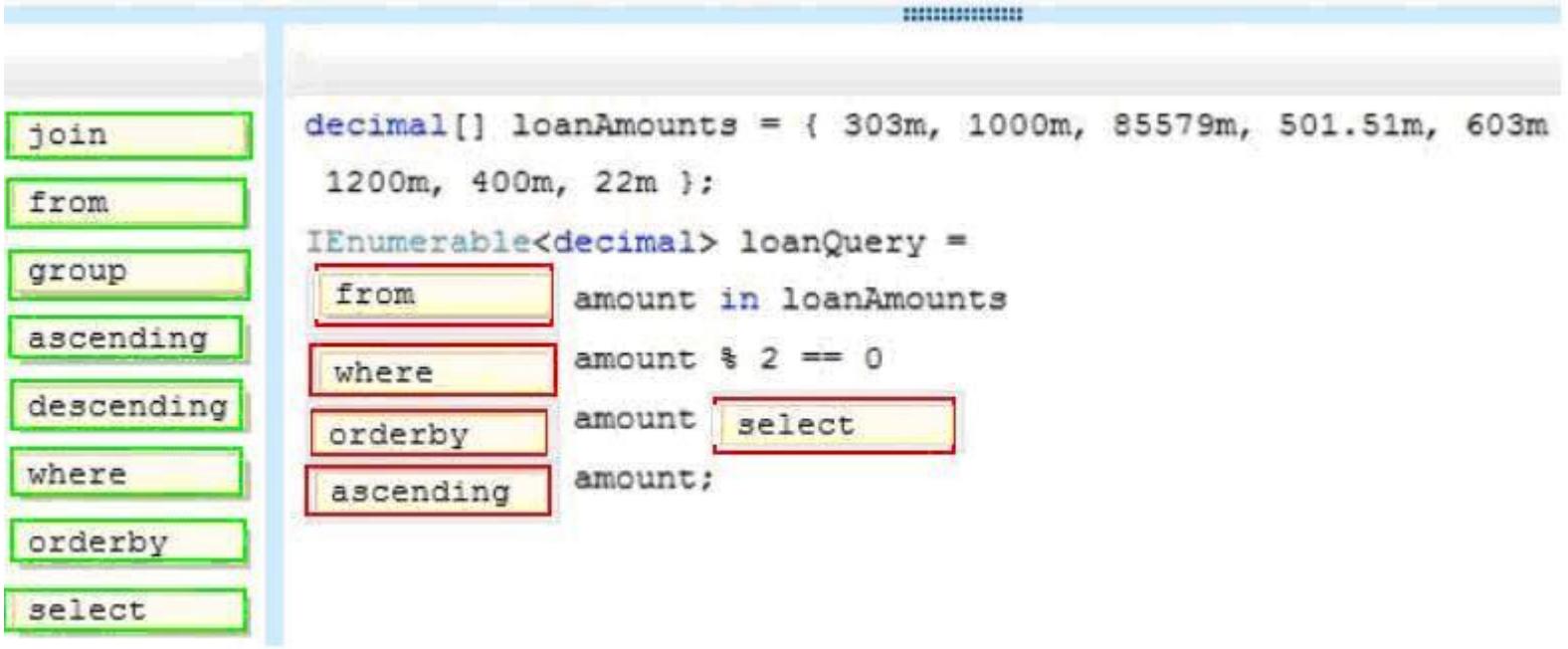
lowest value to the highest value.

You need to ensure that the query correctly returns the decimal values.

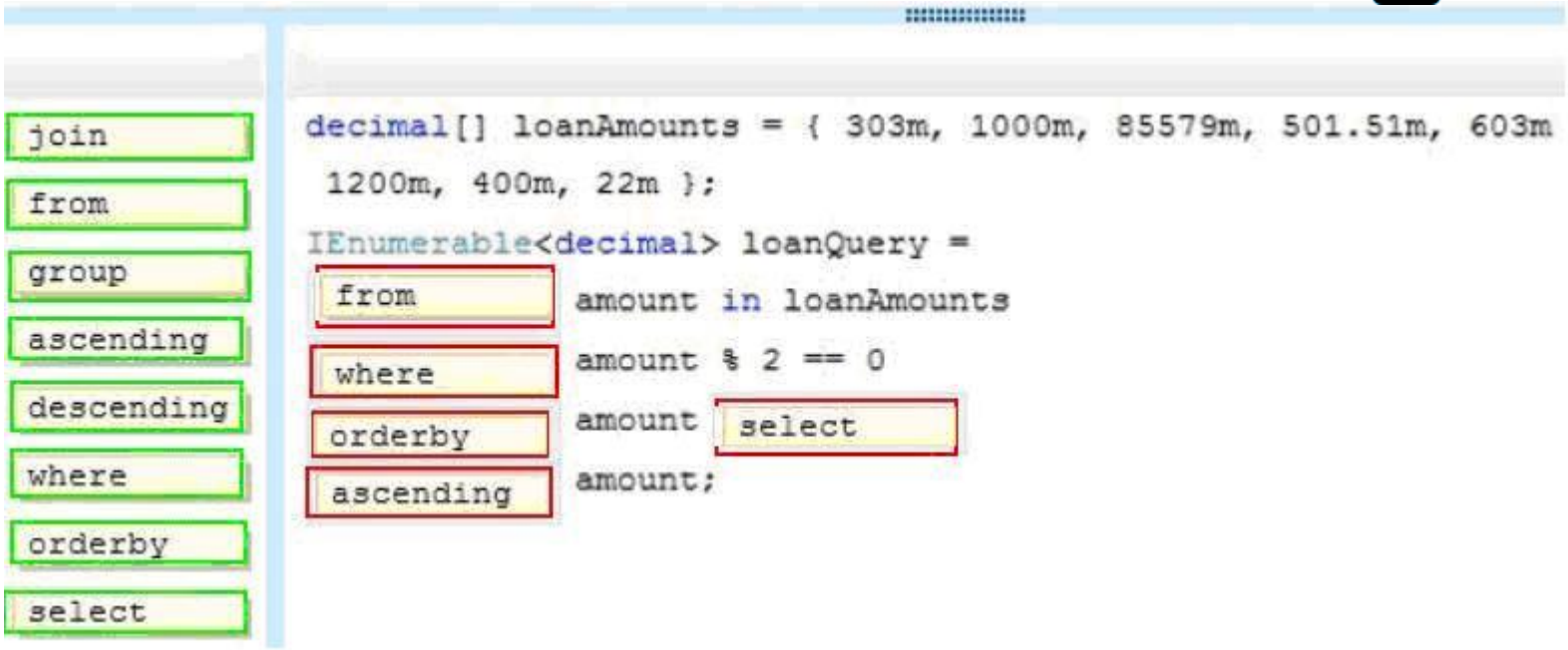
How should you complete the relevant code? (To answer, drag the appropriate code segments to the

correct locations in the answer area. Each code segment may be used once, more than once, or not at all.


**Select and Place:**




**Correct Answer:**




**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 5**
You are developing an application. The application includes a method named ReadFile that reads data

from a file.

The ReadFile() method must meet the following requirements:

-It must not make changes to the data file.

-It must allow other processes to access the data file.

-It must not throw an exception if the application attempts to open a data file that does not exist.

You need to implement the ReadFileQ method. Which code segment should you use?

A. `var fs = File.Open(Filename, FileMode.OpenOrCreate, FileAccess.Read, FileShare.ReadWrite);`

B. `var fs = File.Open(Filename, FileMode.Open, FileAccess.Read, FileShare.ReadWrite);`

C. `var fs = File.Open(Filename, FileMode.OpenOrCreate, FileAccess.Read, FileShare.Write);`

D. `var fs = File.ReadAllLines(Filename);`

E. `var fs = File.ReadAllBytes(Filename);`

A.
B.
C.
D.

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**
Allows you to Open or Create, but not change the file. The folder however can be changed.

**QUESTION 6**
You are developing an application. The application converts a Location object to a string by using a

method named WriteObject. The WriteObject() method accepts two parameters, a Location object and an

XmlObjectSerializer object.

The application includes the following code. (Line numbers are included for reference only.)

```
01 public enum Compass
02 {
03   North,
04   South,
05   East,
06   West
07 }
08 [DataContract]
09 public class Location
10 {
11   [DataMember]
12   public string Label { get; set; }
13   [DataMember]
14   public Compass Direction { get; set; }
15 }
16 void DoWork()
17 {
18   var location = new Location { Label = "Test", Direction = Compass.West };
19   Console.WriteLine(WriteObject(location,
20
21   ));
22 }
```

You need to serialize the Location object as a JSON object.

Which code segment should you insert at line 20?

A. New DataContractSerializer(typeof(Location))
B. New XmlSerializer(typeof(Location))
C. New NetBataContractSenalizer {}
D. New CataConcractJsonSerializer(typeof(Location))

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 7**
You are creating an application that manages information about zoo animals. The application includes a

class named Animal and a method named Save.

The Save() method must be strongly typed. It must allow only types inherited from the Animal class that uses a constructor that accepts no parameters.

You need to implement the Save() method. Which code segment should you use?

A.
```
public static void Save<T>(T target) where T : new(), Animal
{
  ...
}
```

B.
```
public static void Save<T>(T target) where T : Animal
{
  ...
}
```

C.
```
public static void Save<T>(T target) where T : Animal, new()
{
  ...
}
```

D.
```
public static void Save(Animal target)
{
  ...
}
```

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 8**

You are developing an application. The application includes classes named Employee and Person and an interface named IPerson.

The Employee class must meet the following requirements:

-It must either inherit from the Person class or implement the IPerson interface.

-It must be inheritable by other classes in the application.

You need to ensure that the Employee class meets the requirements.

Which two code segments can you use to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A.
```
sealed class Employee : Person
{
  ...
}
```

B.
```
abstract class Employee : Person
{
  ...
}
```

C.
```
sealed class Employee : IPerson
{
  ...
}
```

D.
```
abstract class Employee : IPerson
{
  ...
}
```

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

**Correct Answer:** BD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 9**
You are developing an application that will convert data into multiple output formats.

The application includes the following code. (Line numbers are included for reference only.)

```
01 public class TabDelimitedFormatter : IOutputFormatter<string>
02 {
03   readonly Func<int, char> suffix = col => col % 2 == 0 ? '\n' : '\t';
04   public string GetOutput(IEnumerator<string> iterator, int recordSize)
05   {
06
07   }
08 }
```

You are developing a code segment that will produce tab-delimited output. All output routines implement the

following interface:

You need to minimize the completion time of the GetOutput() method. Which code segment should you

insert at line 06?

A.
```
string output = null;
for (int i = 1; iterator.MoveNext(); i++)
{
  output = string.Concat(output, iterator.Current, suffix(i));
}
return output;
```

B.
```
var output = new StringBuilder();
for (int i = 1; iterator.MoveNext(); i++)
{
  output.Append(iterator.Current);
  output.Append(suffix(i));
}
return output.ToString();
```

C.
```
string output = null;
for (int i = 1; iterator.MoveNext(); i++)
{
  output = output + iterator.Current + suffix(i);
}
return output;
```

D.
```
string output = null;
for (int i = 1; iterator.MoveNext(); i++)
{
  output += iterator.Current + suffix(i);
}
return output;
```

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

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 10**
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 ();

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 11**
You use the Task.Run() method to launch a long-running data processing operation. The data

processing operation often fails in times of heavy network congestion.

If the data processing operation fails, a second operation must clean up any results of the first operation.

You need to ensure that the second operation is invoked only if the data processing operation throws an

unhandled exception.

What should you do?

A. Create a TaskCompletionSource<T> object and call the TrySetException() method of the object.
B. Create a task by calling the Task.ContinueWith() method
C. Examine the Task.Status property immediately after the call to the Task.Run() method.

D. Create a task inside the existing Task.Run() method by using the AttachedToParent option.

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 12**
You are developing an application that uses structured exception handling. The application includes a

class named ExceptionLogger.

The ExceptionLogger class implements a method named LogException by using the following code

segment:

public static void LogException(Exception ex) You have the following requirements:

-Log all exceptions by using the LogException() method of the ExceptionLogger class.

-Rethrow the original exception, including the entire exception stack.

You need to meet the requirements.

Which code segment should you use?

A.
```
catch (Exception ex)
{
  ExceptionLogger.LogException(ex);
  throw;
}
```

B.
```
catch (Exception ex)
{
  ExceptionLogger.LogException(ex);
  throw ex;
}
```

C.
```
catch
{
  ExceptionLogger.LogException(new Exception());
  throw;
}
```

D.
```
catch
{
  var ex = new Exception();
  throw ex;
}
```

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

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 13**
You are developing an application that includes a class named UserTracker. The application includes

the following code segment. (Line numbers are included for reference only.)

```
01 public delegate void AddUserCallback(int i);
02 public class UserTracker
03 {
04   List<User> users = new List<User>();
05   public void AddUser(string name, AddUserCallback callback)
06   {
07     users.Add(new User(name));
08     callback(users.Count);
09   }
10 }
11
12 public class Runner
13 {
14
15   UserTracker tracker = new UserTracker();
16   public void Add(string name)
17   {
18
19   }
20 }
```

You need to add a user to the UserTracker instance. What should you do?

A. Insert the following code segment at line 14:

```
private static void PrintUserCount(int i)
{
  ...
}
```

Insert the following code segment at line 18:

```
AddUserCallback callback = PrintUserCount;
```

B. Insert the following code segment at line 11:

```
delegate void AddUserDelegate(UserTracker userTracker);
```

Insert the following code segment at line 18:

```
AddUserDelegate addDelegate = (userTracker) =>
  {
    ...
  };
addDelegate(tracker);
```

C. Insert the following code segment at line 11:

```
delegate void AddUserDelegate(string name, AddUserCallback callback);
```

Insert the following code segment at line 18:

```
AddUserDelegate adder = (i, callback) =>
  {
    ...
  };
```

D. Insert the following code segment at line 18:

```
tracker.AddUser(name, delegate(int i)
  {
    ...
  });
```

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 14**
You develop an application that displays information from log files.

When a user opens a log file by using the application, the application throws an exception and closes.

The application must preserve the original stack trace information when an exception occurs.

You need to implement the method that reads the log files.

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.)

```
using (StringReader sr = new StringReader("log.txt"))
using (StreamReader sr = new StreamReader("log.txt"))
throw new FileNotFoundException();
throw;
```

```
{
    try
    {
        string line;
        while ((line = sr.ReadLine()) != null)
        {
            Console.WriteLine(line);
        }
    }
    catch (FileNotFoundException e)
    {
        Console.Write(e.ToString());

    }
}
```

**Select and Place:**

```
using (StringReader sr = new StringReader("log.txt"))
using (StreamReader sr = new StreamReader("log.txt"))
throw new FileNotFoundException();
throw;
```

```
using (StreamReader sr = new StreamReader("log.txt"))
{
    try
    {
        string line;
        while ((line = sr.ReadLine()) != null)
        {
            Console.WriteLine(line);
        }
    }
    catch (FileNotFoundException e)
    {
        Console.Write(e.ToString());
        throw;
    }
}
```

**Correct Answer:**

```
using (StringReader sr = new StringReader("log.txt"))
using (StreamReader sr = new StreamReader("log.txt"))
throw new FileNotFoundException();
throw;
```

```
using (StreamReader sr = new StreamReader("log.txt"))
{
    try
    {
        string line;
        while ((line = sr.ReadLine()) != null)
        {
            Console.WriteLine(line);
        }
    }
    catch (FileNotFoundException e)
    {
        Console.Write(e.ToString());
        throw;
    }
}
```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 15**

You are developing an application that includes a class named Kiosk. The Kiosk class includes a static property named Catalog. The Kiosk class is defined by the following code segment. (Line numbers are included for reference only.)

```
01 public class Kiosk
02 {
03   static Catalog _catalog = null;
04   static object _lock = new object();
05   public static Catalog Catalog
06   {
07     get
08     {
09
10       return _catalog;
11     }
12   }
13 }
```

You have the following requirements:

-Initialize the _catalog field to a Catalog instance.

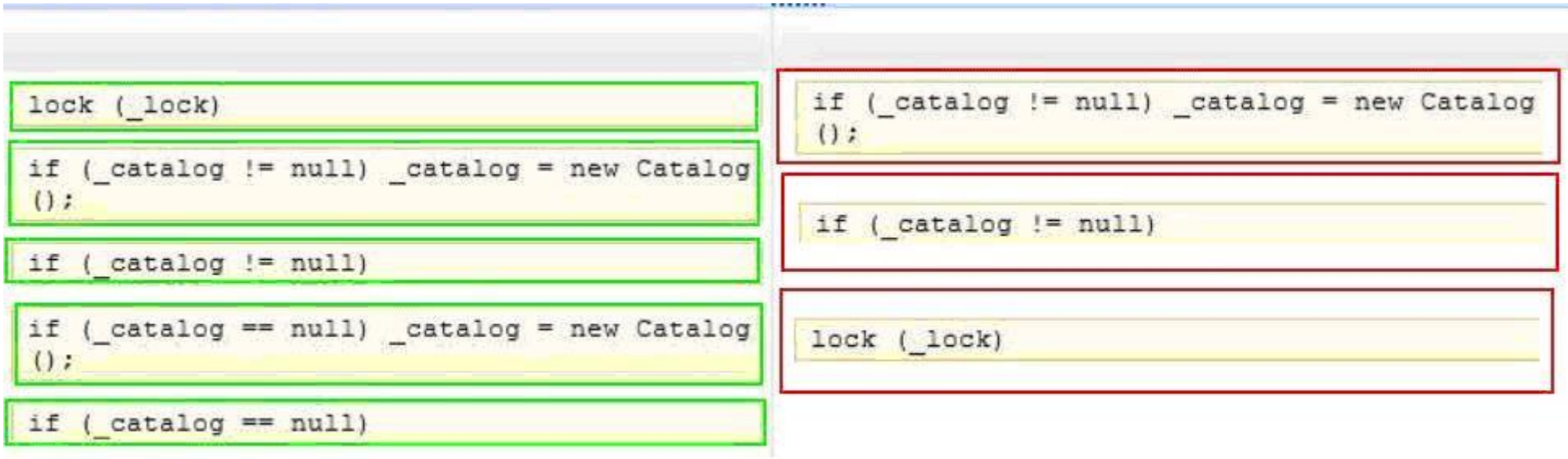
-Initialize the _catalog field only once.

-Ensure that the application code acquires a lock only when the _catalog object must be instantiated.

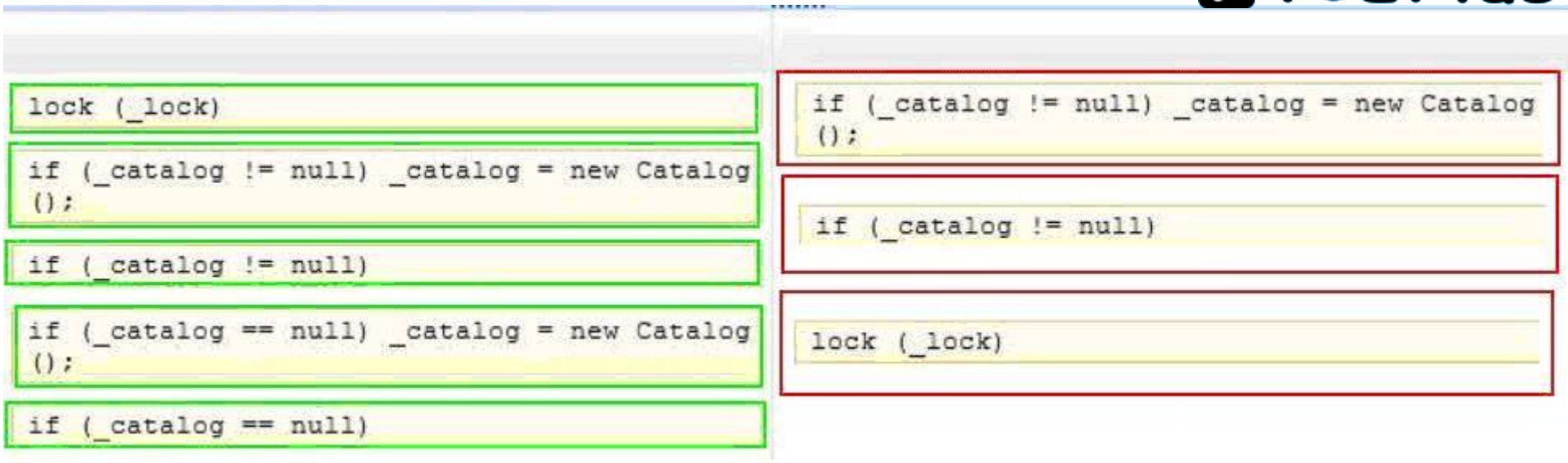
You need to meet the requirements.

Which three code segments should you insert in sequence at line 09? (To answer, move the appropriate code segments from the list of code segments to the answer area and arrange them in the correct order.)


**Select and Place:**




**Correct Answer:**




**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 16**
You are developing an application that will include a method named GetData. The GetData() method will retrieve several lines of data from a web service by using a System.IO.StreamReader object.

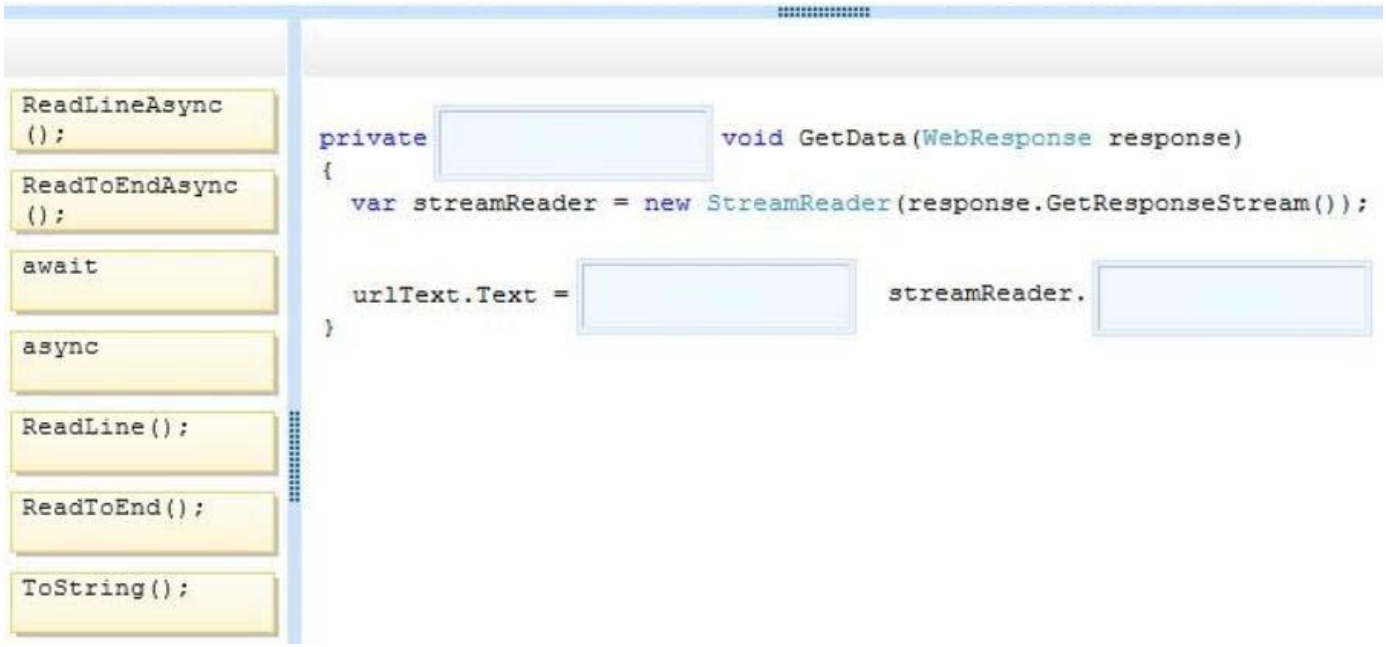
You have the following requirements:

-The GetData() method must return a string value that contains the first line of the response from the web service. -The application must remain responsive while the GetData() method runs.

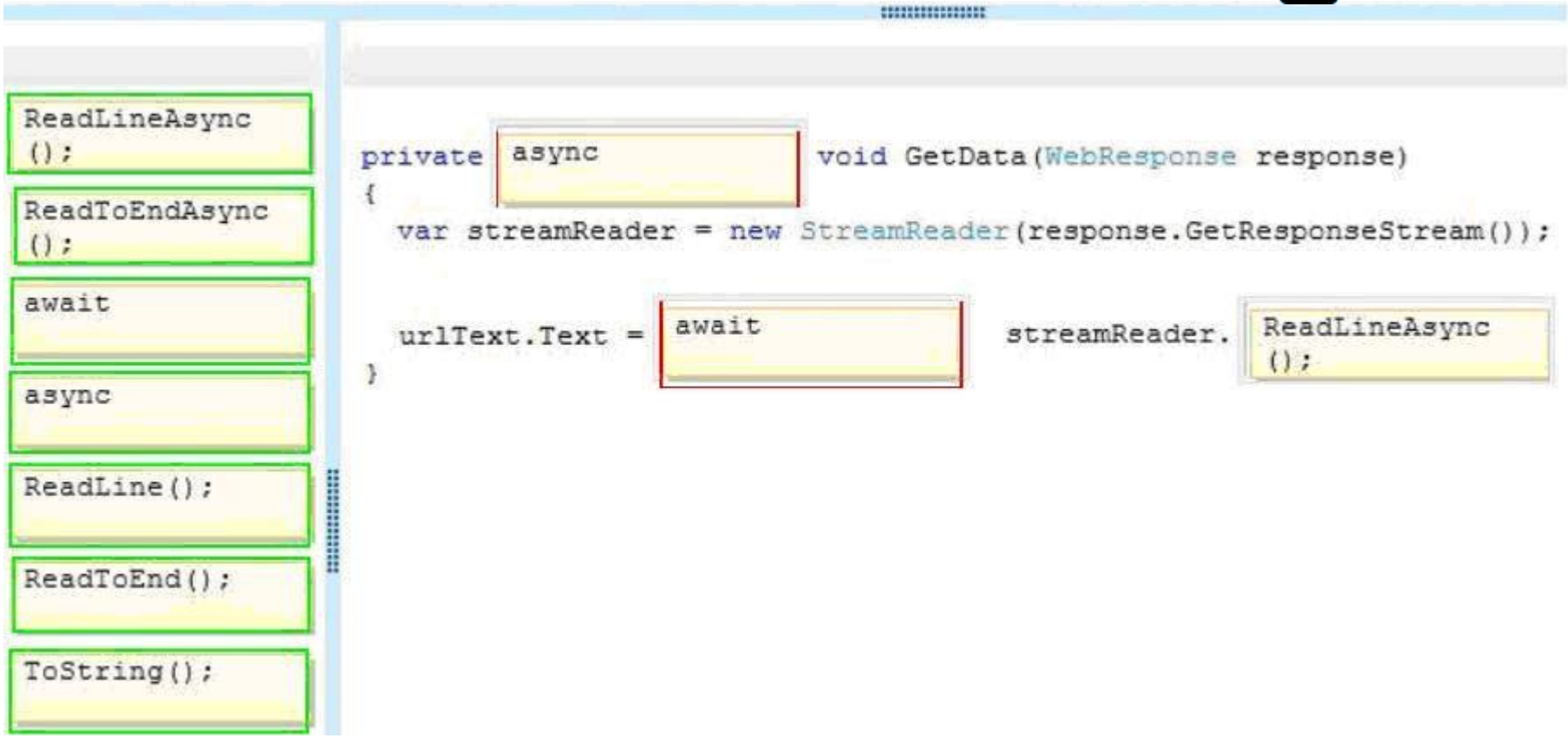
You need to implement the GetData() method.

How should you complete the relevant code? (To answer, drag the appropriate objects to the correct

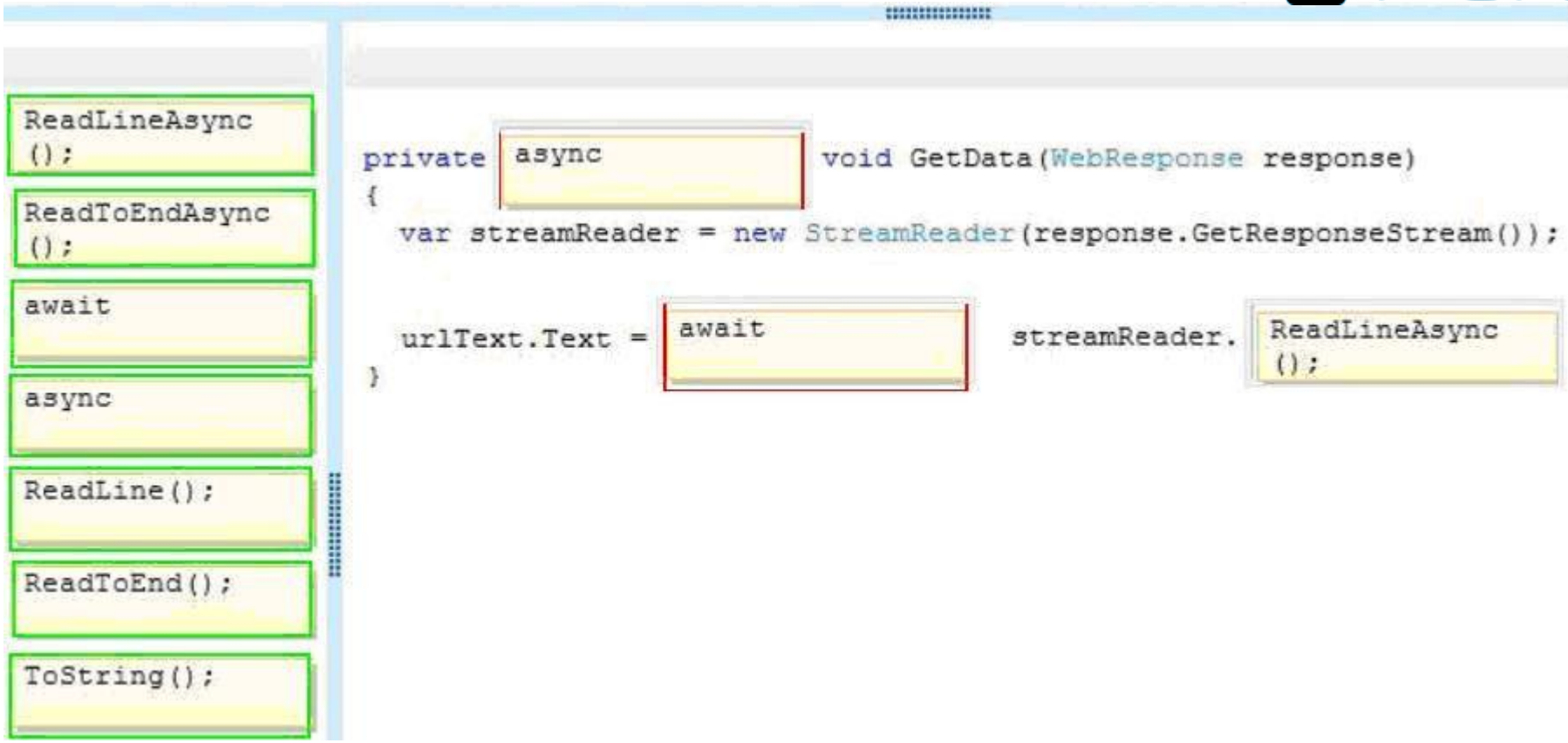
locations in the answer area. Each object may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)




**Select and Place:**




**Correct Answer:**




**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 17**
You are developing an application that implements a set of custom exception types. You declare the custom

exception types by using the following code segments:

```
public class AdventureWorksException : System.Exception { ... }
public class AdventureWorksDbException : AdventureWorksException { ... }
public class AdventureWorksValidationException : AdventureWorksException { ... }
```

The application includes a function named DoWork that throws .NET Framework exceptions and custom exceptions.

The application contains only the following logging methods:

```
static void Log(Exception ex) { ... }
static void Log(AdventureWorksException ex) { ... }
static void Log(AdventureWorksValidationException ex) { ... }
```

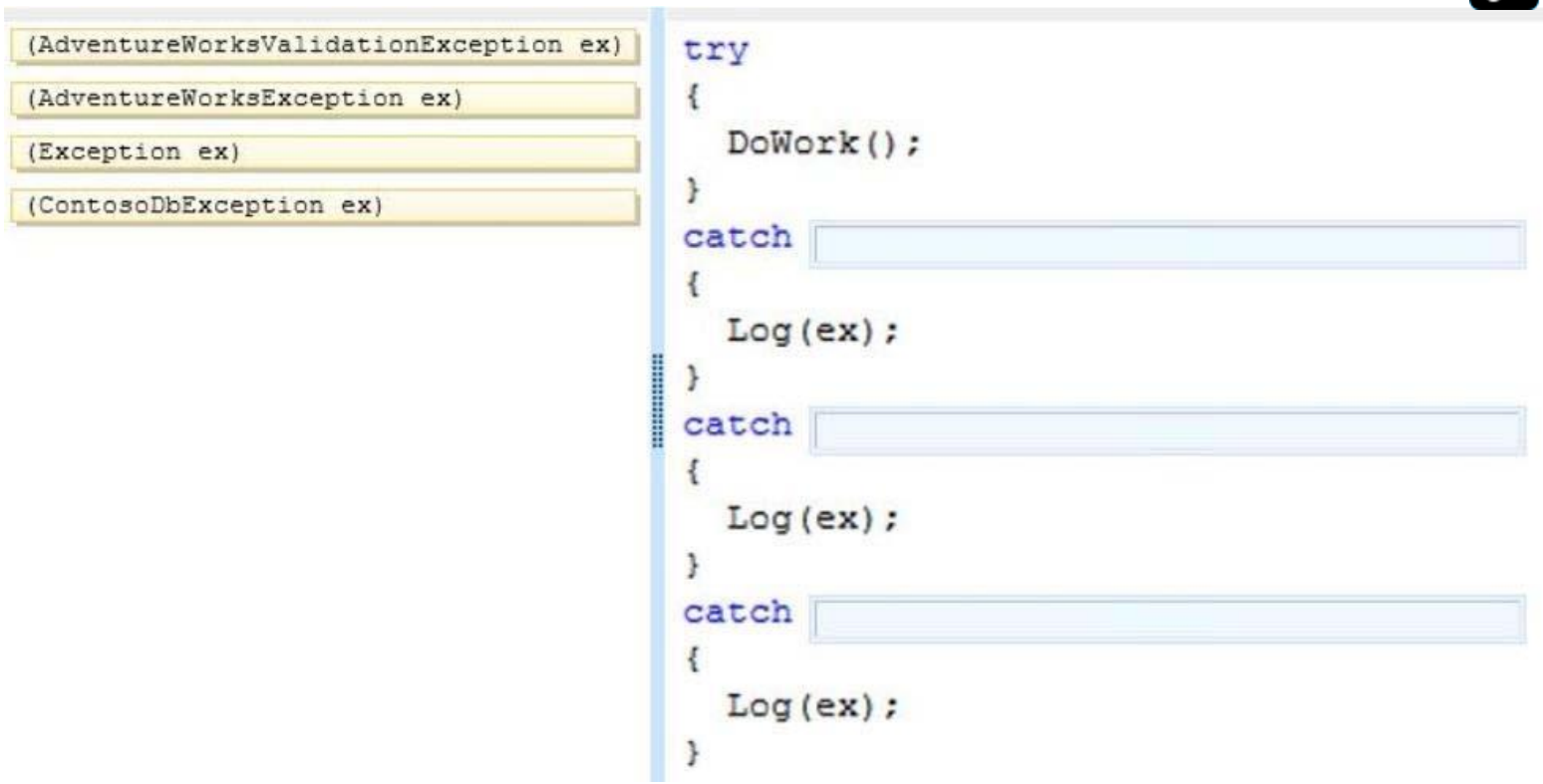
The application must meet the following requirements:

-When AdventureWorksValidationException exceptions are caught, log the information by using the static void Log (AdventureWorksValidationException ex) method. -When AdventureWorksDbException or other

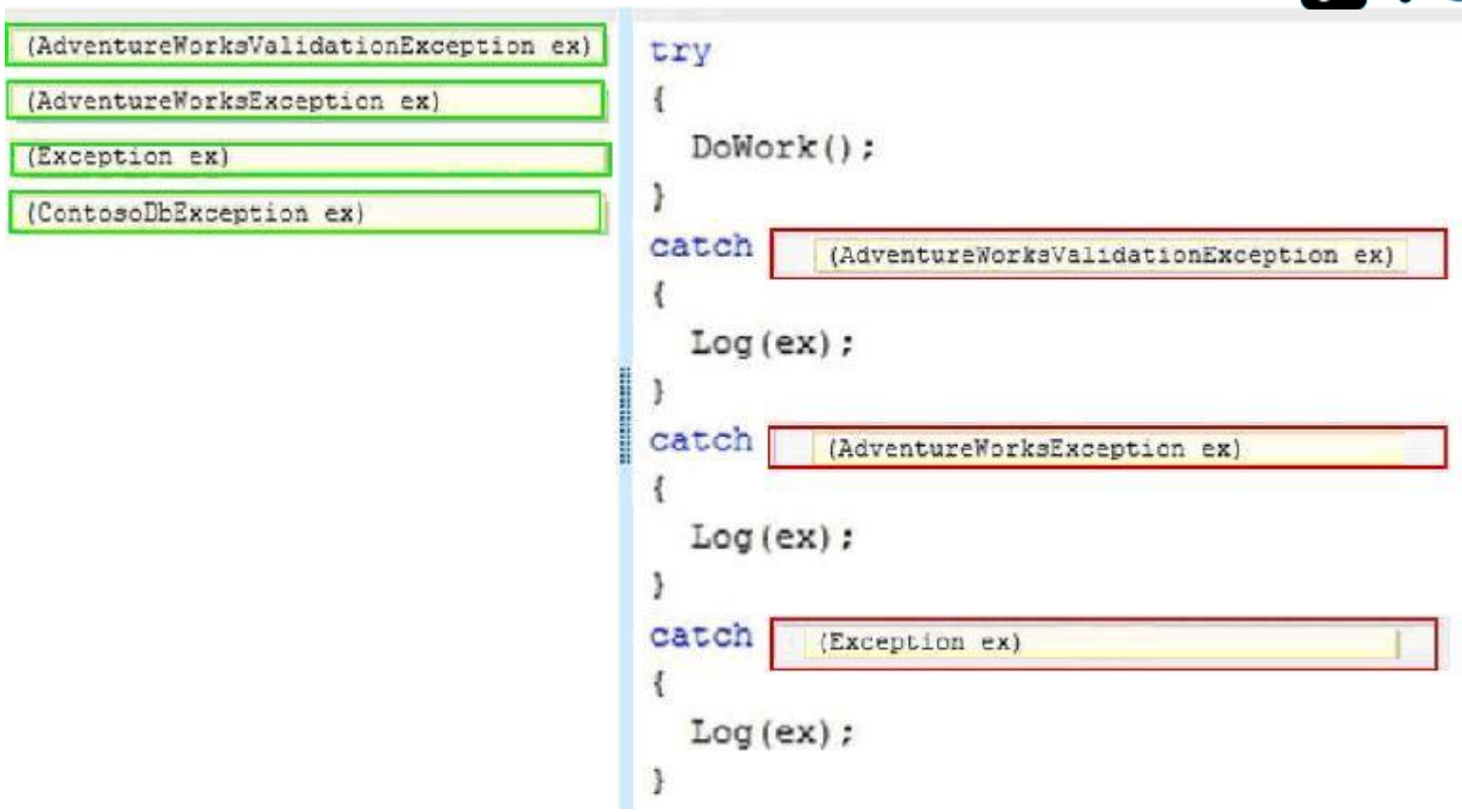
AdventureWorksException exceptions are caught, log the information by using the static void I oq( AdventureWorksException ex) method.

You need to meet the requirements.

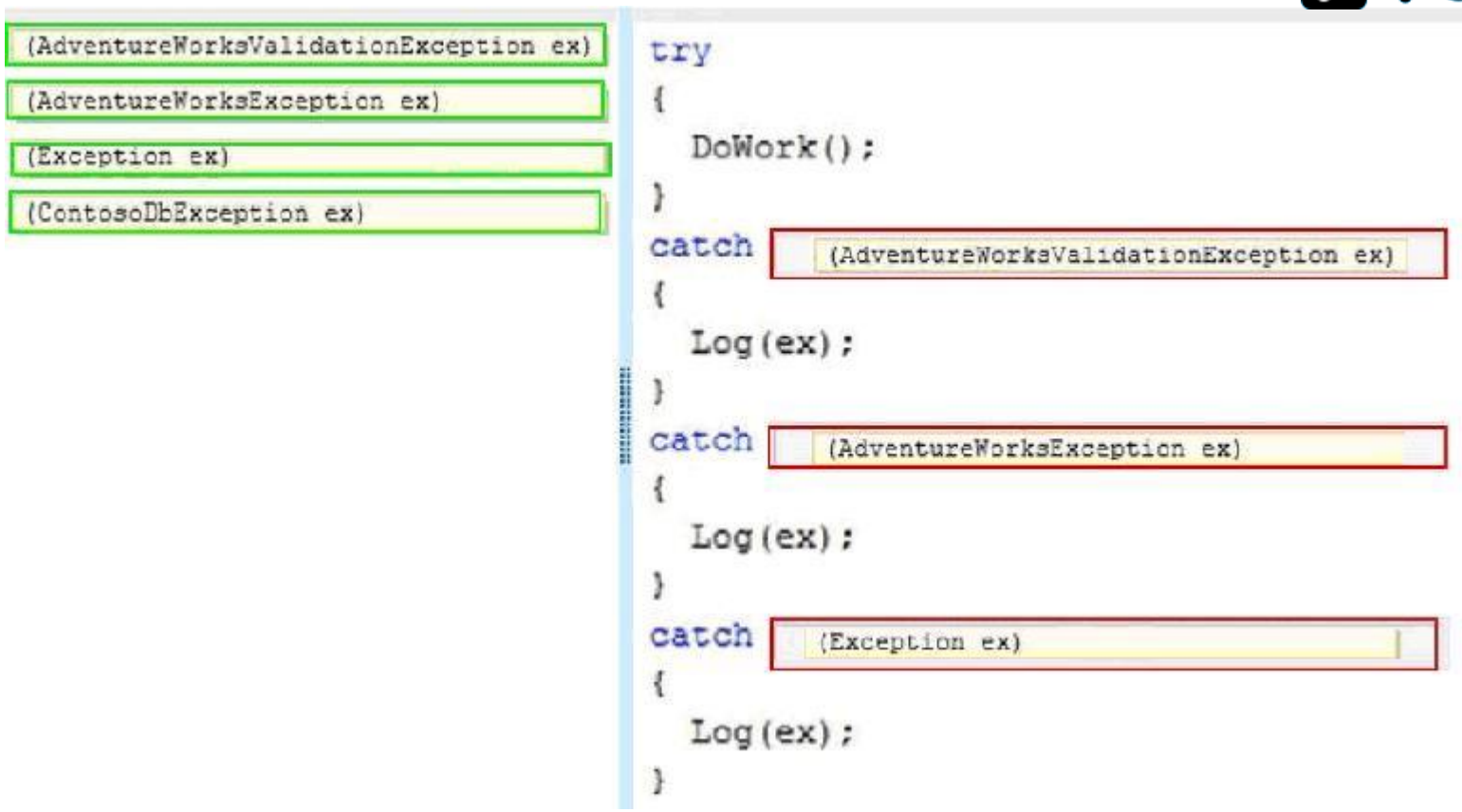
How should you complete the relevant code? (To answer, drag the appropriate code segments to the correct locations in the answer area. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)




**Select and Place:**




**Correct Answer:**




**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 18**
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.

**Correct Answer:** BD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 19**
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

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 20**
You are debugging an application that calculates loan interest. The application includes the following

code. (Line numbers are included for reference only.)

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

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?

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);

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**
Notice that the question says "in all builds of the application". If this were just the production version, Debug.Assert would be the answer because Debug symbols are not present in production.

**QUESTION 21**
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

**Correct Answer:** A
**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 22**
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

**Correct Answer:** CD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 23**
You are adding a public method named UpdateGrade to a public class named ReportCard.

The code region that updates the grade field must meet the following requirements:

-It must be accessed by only one thread at a time. -It must not be vulnerable to a deadlock situation. You

need to implement the UpdateGrade() method.

What should you do?

A. Add a private object named **lockObject** to the **ReportCard** class. Place the code region inside the following lock statement:

```
lock (lockObject)
{
  ...
}
```

B. Place the code region inside the following lock statement:

```
lock (this)
{
  ...
}
```

C. Add a public static object named **lockObject** to the **ReportCard** class. Place the code region inside the following lock statement:

```
lock (typeof(ReportCard))
{
  ...
}
```

D. Apply the following attribute to the **UpdateGrade()** method signature:

```
[MethodImpl(MethodImplOptions.Synchronized)]
```

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

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 24**
You are implementing a method that creates an instance of a class named User. The User class contains a public event named Renamed. The following code segment defines the Renamed event: Public event

EventHandler<RenameEventArgs> Renamed;

You need to create an event handler for the Renamed event by using a lambda expression.

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.)

```
user.Renamed -= delegate(object sender, RenamedEventArgs e)
user.Renamed -= (sender, e) =>
user.Renamed += delegate(object sender, RenamedEventArgs e)
user.Renamed += (sender, e) =>
users[0] = user;
users.Add(user);
users.Insert(user);
```

```
public string GetResponse(char letter)
{
    string response;
    {
ender, e) =>
        response = "animal";
        break;
ender, e) =>
        response = "mineral";
        break;
legate(object sender, RenamedEventArgs e)
        response = "invalid choice";
```

**Select and Place:**

**Correct Answer:**

**Section: (none)**
**Explanation**

**Explanation/Reference:**
This is only the answer slide. It should be 1. Users[0]=user; 2. User.Renamed += (sender,e)=>, 3. User.Renamed += (sender,e)=>, 4. User.Renamed += delegate(object sender, RenamedEventArgs e) (please note that the yellow areas are where these should be dragged, but they got cut off!)

**QUESTION 25**
You are developing an application by using C#.

The application includes an object that performs a long running process.

You need to ensure that the garbage collector does not release the object's resources until the process

completes.

Which garbage collector method should you use?

A. WaitForFullGCComplete()
B. WaitForFullGCApproach()
C. KeepAlive()
D. WaitForPendingFinalizers()

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**
Please note that "KeepAlive" is an option when you want to keep resources alive so that the garbage collector does not destroy them. Then, you may add additional code that is more specific for how long you want the resource(s) to be kept alive. Even though the WaitForFullGCComplete method seems correct, that method is waiting for full garbage collection to be complete, not for the processes to complete.

**QUESTION 26**

An application includes a class named Person. The Person class includes a method named GetData.

You need to ensure that the GetData() method can be used only by the Person class and not by any class derived from the Person class.

Which access modifier should you use for the GetData() method?

A. Public
B. Protected Internal
C. Internal
D. Private
E. Protected

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 27**
You are developing an application that includes the following code segment. (Line numbers are included for reference only.)

```
01 class Customer
02 {
03   public string CompanyName { get; set; }
04   public string Id { get; set; }
05 }
06 const string sqlSelectCustomers = "SELECT CustomerID, CompanyName FROM Customers";
07 private static IEnumerable<Customer> GetCustomers(string sqlConnectionString)
08 {
09   List<Customer> customers = new List<Customer>();
10   SqlConnection sqlConnection = new SqlConnection(sqlConnectionString);
11   using (sqlConnection)
12   {
13     SqlCommand sqlCommand = new SqlCommand(sqlSelectCustomers, sqlConnection);
14
15     using (SqlDataReader sqlDataReader = sqlCommand.ExecuteReader())
16     {
17
18       {
19         Customer customer = new Customer();
20         customer.Id = (string)sqlDataReader["CustomerID"];
21         customer.CompanyName = (string)sqlDataReader["CompanyName"];
22         customers.Add(customer);
23       }
24     }
25   }
26   return customers;
27 }
```

The GetCustomers() method must meet the following requirements:

-Connect to a Microsoft SQL Server database.

-Populate Customer objects with data from the database.

-Return an IEnumerable<Customer> collection that contains the populated Customer objects.

You need to meet the requirements.

Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Insert the following code segment at line 17: while (sqlDataReader.GetValues())
B. Insert the following code segment at line 14: sqlConnection.Open();
C. Insert the following code segment at line 14: sqlConnection.BeginTransaction();
D. Insert the following code segment at line 17: while (sqlDataReader.Read())
E. Insert the following code segment at line 17: while (sqlDataReader.NextResult())

**Correct Answer:** BD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 28**
You are developing an application that includes a class named Customer.

The application will output the Customer class as a structured XML document by using the following code

segment:

```
<?xml version="1.0" encoding="utf-8"?>
<Prospect xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 ProspectId="9c027bb8-65f1-40a9-8afa-ac839f3cdc5d" xmlns="http://prospect">
  <FullName>David Jones</FullName>
  <DateOfBirth>1977-06-11T00:00:00</DateOfBirth>
</Prospect>
```

You need to ensure that the Customer class will serialize to XML.

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.)

```
[XmlRoot("Customer", Namespace = "http://customer")]
[XmlRoot("Prospect", Namespace = "http://prospect")]
[XmlAttribute("ProspectId")]
[XmlElement("ProspectId")]
[XmlChoiceIdentifier]
[XmlIgnore]
[XmlArrayItem]
[XmlElement("FullName")]
```

```
public class Customer
{
    public Guid Id { get; set; }
    public string Name { get; set; }
    public DateTime DateOfBirth { get; set; }
    public int Tin { get; set; }
}
```

**Select and Place:**

```
[XmlRoot("Customer", Namespace = "http://customer")]
[XmlRoot("Prospect", Namespace = "http://prospect")]
[XmlAttribute("ProspectId")]
[XmlElement("ProspectId")]
[XmlChoiceIdentifier]
[XmlIgnore]
[XmlArrayItem]
[XmlElement("FullName")]
```

```
[XmlRoot("Prospect", Namespace = "http://prospect")]
public class Customer
{
    [XmlAttribute("ProspectId")]
    public Guid Id { get; set; }
    [XmlElement("FullName")]
    public string Name { get; set; }
    public DateTime DateOfBirth { get; set; }
    [XmlIgnore]
    public int Tin { get; set; }
}
```

**Correct Answer:**

```
[XmlRoot("Customer", Namespace = "http://customer")]
[XmlRoot("Prospect", Namespace = "http://prospect")]
[XmlAttribute("ProspectId")]
[XmlElement("ProspectId")]
[XmlChoiceIdentifier]
[XmlIgnore]
[XmlArrayItem]
[XmlElement("FullName")]
```

```
[XmlRoot("Prospect", Namespace = "http://prospect")]
public class Customer
{
    [XmlAttribute("ProspectId")]
    public Guid Id { get; set; }
    [XmlElement("FullName")]
    public string Name { get; set; }
    public DateTime DateOfBirth { get; set; }
    [XmlIgnore]
    public int Tin { get; set; }
}
```

**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 29**
You are developing an application. The application converts a Location object to a string by using a

method named WriteObject.

The WriteObject() method accepts two parameters, a Location object and an XmlObjectSerializer object.

The application includes the following code. (Line numbers are included for reference only.)

```
01 public enum Compass
02 {
03   North,
04   South,
05   East,
06   West
07 }
08 [DataContract]
09 public class Location
10 {
11   [DataMember]
12   public string Label { get; set; }
13   [DataMember]
14   public Compass Direction { get; set; }
15 }
16 void DoWork()
17 {
18   var location = new Location { Label = "Test", Direction = Compass.West };
19   Console.WriteLine(WriteObject(location,
20
21   ));
22 }
```

You need to serialize the Location object as XML. Which code segment should you insert at line 20?

A. New XmlSerializer(typeof(Location))
B. New NetDataContractSerializer()
C. New DataContractJsonSerializer {typeof (Location) )
D. New DataContractSerializer(typeof(Location))

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 30**
You are testing an application. The application includes methods named CalculateInterest and 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.)

```
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  }
```

You have the following requirements:

-The CalculateInterest() 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.)

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")]

**Correct Answer:** BD
**Section: (none)**
**Explanation**

**Explanation/Reference:**