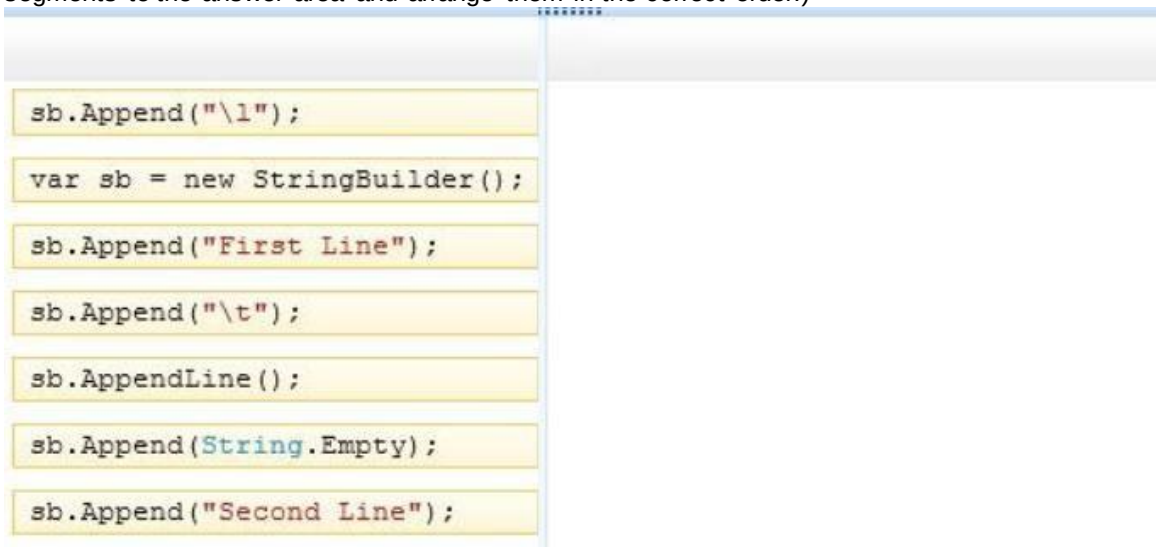
Vendor: Microsoft

Exam Code: 70-483

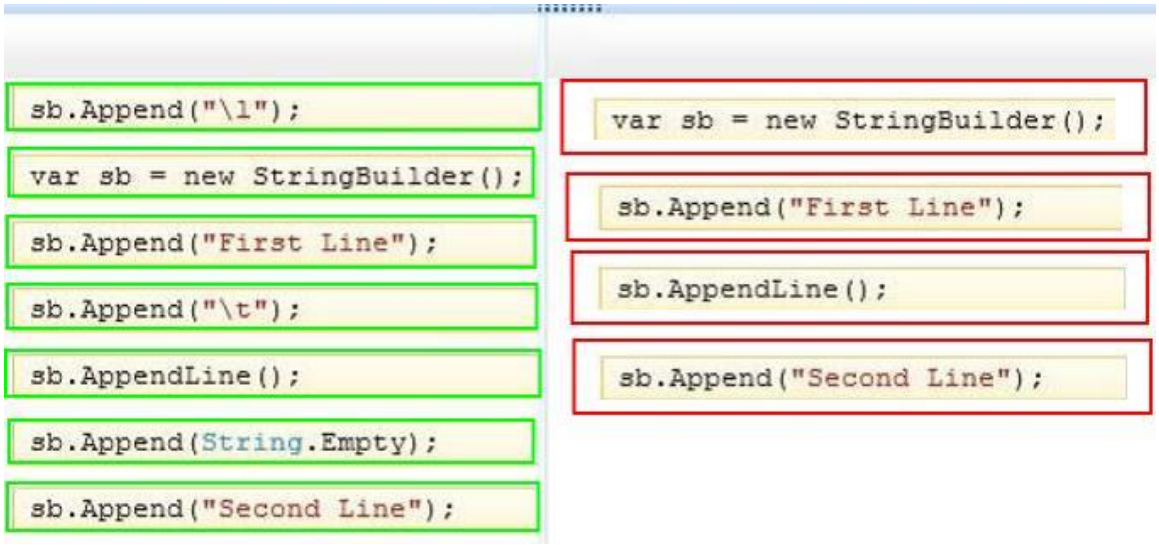
Exam Name: Microsoft Programming in C#

Questions and Answers No.: 51-60 (231Q&As)

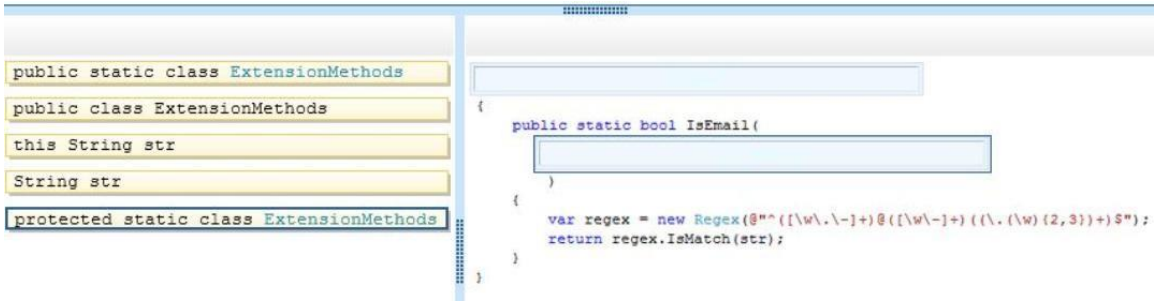
QUESTION 51
Drag and Drop Question
You are developing an application by using C#.
The application will output the text string "First Line" followed by the text string "Second Line".
You need to ensure that an empty line separates the text strings.
Which four code segments should you use in sequence? (To answer, move the appropriate code segments to the answer area and arrange them in the correct order.)



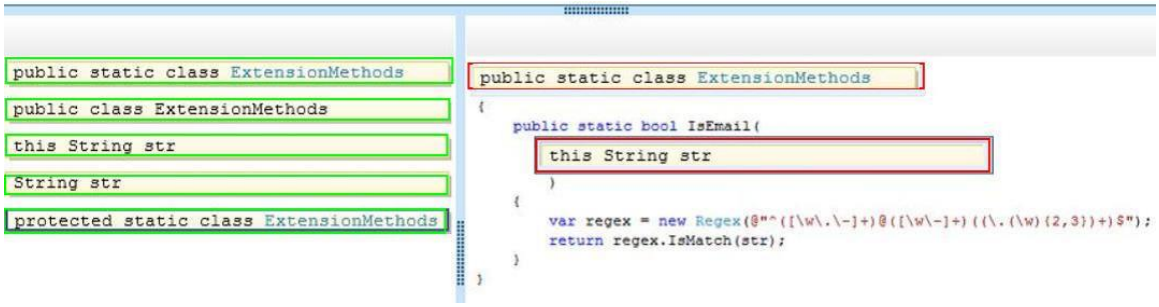
Answer:



QUESTION 52
Drag and Drop Question
You are developing a class named ExtensionMethods.
You need to ensure that the ExtensionMethods class implements the IsEmail() method on string objects.
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.)



Answer:



QUESTION 53
You are modifying an existing application.
The application includes a Loan class and a Customer class.
The following code segment defines the classes.

```
class Loan
{
  public Loan(decimal amount, int term, decimal rate)
  {
    Term = term;
    Amount = amount;
    Rate = rate;
  }
  public decimal Amount { get; set; }
  public decimal Rate { get; set; }
  public int Term { get; set; }
}

class Customer
{
  public Customer(string firstName, string lastName, Collection<Loan> loans)
  {
    FirstName = firstName;
    LastName = lastName;
    LoanCollection = loans;
  }
  public string FirstName { get; set; }
  public string LastName { get; set; }
  public Collection<Loan> LoanCollection { get; set; }
}
```

You populate a collection named customer-Collection with Customer and Loan objects by using the following code segment:

```
Collection<Customer> customerCollection = new Collection<Customer>();
Collection<Loan> customerLoans = new Collection<Loan>();
customerLoans.Add(new Loan(1000m, 2, 0.025m));
customerLoans.Add(new Loan(3000m, 4, 0.045m));
customerLoans.Add(new Loan(5000m, 6, 0.045m));
customerCollection.Add(new Customer("Steve", "Jones", customerLoans));
```

You create a largeCustomerLoans collection to store the Loan objects by using the following code segment:

```
Collection<Loan> largeCustomerLoans = new Collection<Loan>();
```

All loans with an Amount value greater than or equal to 4000 must be tracked.
You need to populate the largeCustomerLoans collection with Loan objects.
Which code segment should you use?

A.
```
foreach (Customer customer in customerCollection)
{
  foreach (Loan loan in customer.LoanCollection)
  {
    if (loan.Amount >= 4000m)
    {
      customer.LoanCollection.Add(loan);
    }
  }
}
```

B.
```
foreach (Loan customer in customerCollection)
{
  foreach (Loan loan in largeCustomerLoans)
  {
    if (loan.Amount >= 4000m)
    {
      largeCustomerLoans.Add(loan);
    }
  }
}
```

C.
```
foreach (Loan loan in largeCustomerLoans)
{
  foreach (Customer customer in customerCollection)
  {
    if (loan.Amount >= 4000m)
    {
      customer.LoanCollection.Add(loan);
    }
  }
}
```

D.
```
foreach (Customer customer in customerCollection)
{
  foreach (Loan loan in customer.LoanCollection)
  {
    if (loan.Amount >= 4000m)
    {
      largeCustomerLoans.Add(loan);
    }
  }
}
```

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

Answer: D
Explanation:
Must add to the largeCustomerLoans collection, not the customerLoanCollection.
We iterate through each customer in customerCollection and check each loan belonging to this customer.

QUESTION 54
You are developing an application by using C#.
The application includes the following code segment.
(Line numbers are included for reference only.)
The DoWork() method must throw an InvalidCastException exception if the obj object is not of type IDataContainer when accessing the Data property.
You need to meet the requirements.
Which code segment should you insert at line 07?

```
01 public interface IDataContainer
02 {
03   string Data { get; set; }
04 }
05 void DoWork(object obj)
06 {
07
08   if (dataContainer != null)
09   {
10     Console.WriteLine(dataContainer.Data);
11   }
12 }
```

A. `var dataContainer = (IDataContainer) obj;`
B. `var dataContainer = obj as IBataContamer;`
C. `var dataContainer = obj is IDataContainer;`
D. `dynamic dataContainer = obj;`

Answer: A

QUESTION 55
You are developing an application that includes the following code segment. (Line numbers are included for reference only.)
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.)

```
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 }
```

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())`

Answer: BD
Explanation:
sqlConecction.Open in line 14
The SqlConnection.Open method opens a database connection with the property settings specified by the ConnectionString.
while (SqlDataReader.Read()) in line 17
Read the next line until end of file.
The SqlDataReader.Read method Advances the SqlDataReader to the next record.
The value is true if there are more rows; otherwise false.

QUESTION 56
Drag and Drop Question
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; }
}
```

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; }
}
```

QUESTION 57
An application will upload data by using HTML form-based encoding.
The application uses a method named SendMessage.
The SendMessage() method includes the following code. (Line numbers are included for reference only.)

```
01 public Task<byte[]> SendMessage(string url, int intA, int intB)
02 {
03    var client = new WebClient();
04
05 }
```

The receiving URL accepts parameters as form-encoded values.
You need to send the values intA and intB as form-encoded values named a and b, respectively.

Which code segment should you insert at line 04?

A.
```
var data = string.Format("a={0}&b={1}", intA, intB);
return client.UploadStringTaskAsync(new Uri(url), data);
```

B.
```
var data = string.Format("a={0}&b={1}", intA, intB);
return client.UploadFileTaskAsync(new Uri(url), data);
```

C.
```
var data = string.Format("a={0}&b={1}", intA, intB);
return client.UploadDataTaskAsync(new Uri(url), Encoding.UTF8.GetBytes(data));
```

D.
```
var nvc = new NameValueCollection() { { "a", intA.ToString() }, { "b", intB.ToString() } };
return client.UploadValuesTaskAsync(new Uri(url), nvc);
```

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

Answer: D

QUESTION 58
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.)
You need to serialize the Location object as XML.
Which code segment should you insert at line 20?

```
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 }
```

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

Answer: D

QUESTION 59
You are developing an application that includes the following code segment. (Line numbers are included for reference only.)
You need to ensure that the application accepts only integer input and prompts the user each time non-integer input is entered.
Which code segment should you add at line 19?

```
01 using System;
02 class MainClass
03 {
04   public static void Main(string[] args)
05   {
06     bool bValidInteger = false;
07     int value = 0;
08     do
09     {
10       Console.WriteLine("Enter an integer:");
11       bValidInteger = GetValidInteger(ref value);
12     } while (!bValidInteger);
13     Console.WriteLine("You entered a valid integer, " + value);
14   }
15   public static bool GetValidInteger(ref int val)
16   {
17     string sLine = Console.ReadLine();
18     int number;
19
20     {
21       return false;
22     }
23     else
24     {
25       val = number;
26       return true;
27     }
28   }
29 }
```

A. `If (!int.TryParse{sLine, out number))`
B. `If ((number = Int32.Parse(sLine)) = = Single.NaN)`
C. `If ((number = int.Parse (sLine)) > Int32.MaxValue)`
D. `If (Int32.TryParse(sLine, out number))`

Answer: A

QUESTION 60
You are developing an application that will process orders.
The debug and release versions of the application will display different logo images.
You need to ensure that the correct image path is set based on the build configuration.
Which code segment should you use?

A.
```
#if (DEBUG)
  imgPath = "TempFolder/Images/";
#elif (RELEASE)
  imgPath = "DevFolder/Images/";
#endif
```

B.
```
if (DEBUG)
  imgPath = "TempFolder/Images/";
else
  imgPath = "DevFolder/Images/";
endif
```

C.
```
#if (DEBUG)
  imgPath = "TempFolder/Images/";
#else
  imgPath = "DevFolder/Images/";
#endif
```

D.
```
if(Debugger.IsAttached)
{
  imgPath = "TempFolder/Images/";
}
else
{
  imgPath = "DevFolder/Images/";
}
```

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

Answer: C