

1.

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

2.

DRAG DROP -

You are developing a custom collection named LoanCollection for a class named Loan class.

You need to ensure that you can process each Loan object in the LoanCollection collection by using a foreach loop.

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:

: IComparable

: IEnumerable

: IDisposable

public IEnumerator GetEnumerator()

public int CompareTo(object obj)

public void Dispose()

_loanCollection[0].Amount++;

return obj == null ? 1 : _loanCollection.Length;

return _loanCollection.GetEnumerator();

```

public class LoanCollection
{
    private readonly Loan[] _loanCollection;
    public LoanCollection(Loan[] loanArray)
    {
        _loanCollection = new Loan[loanArray.Length];

        for (int i = 0; i < loanArray.Length; i++)
        {
            _loanCollection[i] = loanArray[i];
        }
    }

    [ ]
    {
        [ ]
    }
}

```

3.

You are developing an application by using C#. The application includes the following code segment. (Line numbers are included for reference only.)

```

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 }

```

The DoWork() method must not throw any exceptions when converting the obj object to the IDataContainer interface or when accessing the Data property.

You need to meet the requirements. Which code segment should you insert at line 07?

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

4.

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)
{
    ...
}
```
- ☐ E.

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

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E

5.

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.)

Select and Place:

public static class ExtensionMethods

public class ExtensionMethods

this String str

String str

protected static class ExtensionMethods

```
{
    public static bool IsUrl(
        [ ]
    )
    {
        var regex = new Regex(
            "(https?://)?([A-Za-z9-0-]*\\.)?([A-Za-z0-9-]*)" +
            "\\.[A-Za-z0-9]*/*.*");
        return regex.IsMatch(str);
    }
}
```

6.

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
{
    ...
}
```

DRAG DROP -

You need to ensure that the `ExtensionMethods` class implements the `IsUrl()` extension method on string objects.

```

Target 1
{
    public static bool IsUrl(
        Target 2
        )
    {
        var regex = new Regex(
            "(https?://)?([A-Za-z0-9-]*\\.)*?([A-Za-z0-9-]*" +
            "\\.[A-Za-z0-9-]*/*\\.*)" );
        return regex.IsMatch(str);
    }
}

```

You may need to drag the split bar between panes or scroll to view content.)

Select and Place:

Code Segments	Answer Area
<code>public static class ExtensionMethods</code>	Target 1: <input type="text"/> Code Se
<code>public class ExtensionMethods</code>	
<code>this String str</code>	Target 2: <input type="text"/> Code Se
<code>String str</code>	
<code>protected static class ExtensionMethods</code>	

8.

You are implementing a method named Calculate that performs conversions between value types and reference types. The following code segment implements the method. (Line numbers are included for reference only.)

```
01 public static void Calculate(float amount)
02 {
03     object amountRef = amount;
04
05     Console.WriteLine(balance);
06 }
```

You need to ensure that the application does not throw exceptions on invalid conversions. Which code segment should you insert at line 04?

- A. `int balance = (int) (float)amountRef;`
- B. `int balance = (int)amountRef;`
- C. `int balance = amountRef;`
- D. `int balance = (int) (double) amountRef;`

9.

DRAG DROP -

You have a class named Product that has a property named Name.

You have the following code.

```
Product oneProduct = new Product();  
oneProduct.Name = "aName";  
  
string productName = oneProduct.Target 1 ().Target 2 ().First(  
    prop => prop.Name == "Name" ). Target 3 (Target 4 ).ToString();
```

You need to get the Name property of oneProduct.

How should you complete the code? To answer, drag the appropriate code elements to the correct targets. Each code element 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.

NOTE: Each correct selection is worth one point.

Select and Place:

Code Segments

GetProperties

GetType

GetValue

oneProduct

"oneProduct"

Answer Area

Target 1:

Target 2:

Target 3:

Target 4:

10.

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. ReRegisterForFinalize()
- B. SuppressFinalize()
- C. Collect()
- D. WaitForFullGCApproach()

11.

You plan to implement the following interfaces:

```
interface IFahrenheit
{
    double Temp () ;
}
interface ICelsius
{
    double Temp () ;
}
```

You have the following methods:

returns the temperature in Celsius.

getCelsiusFromKelvin

▪

returns the temperature in Fahrenheit.

-> getFahrenheitFromKelvin

You need to implement both interfaces within a class named TempControl. The TempControl class must return the Celsius temperature as the default temperature if the following code executes.

```
TempControl t = new TempControl () ;
var celsiusTemp = t.Temp () ;
```

How should you implement the interfaces? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
partial class TempControl:
{
    double kelvin;

    public double
    {
        return getCelsiusFromKelvin();
    }

    double
    {
        return getFahrenheitFromKelvin();
    }
}
```

Dropdown 1 (next to `partial class TempControl:`):

- ICelsius
- IFahrenheit
- IFahrenheit, ICelsius

Dropdown 2 (next to `public double`):

- ICelsius.Temp()
- IFahrenheit.Temp()
- Temp()

Dropdown 3 (next to `double`):

- ICelsius.Temp()
- IFahrenheit.Temp()
- Temp()

12.

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. `WaitForFullGCCComplete()`
- B. `WaitForFullGCApproach()`
- C. `KeepAlive()`
- D. `WaitForPendingFinalizers()`

13.

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

14.

DRAG DROP -

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.)

Select and Place:

```
sb.Append("\n");
var sb = new StringBuilder();
sb.Append("First Line");
sb.Append("\t");
sb.AppendLine();
sb.Append(String.Empty);
sb.Append("Second Line");
```

15.

You are developing an application. The application includes classes named Mammal and Animal and an interface named IAnimal.

The Mammal class must meet the following requirements:

-> It must either inherit from the Animal class or implement the IAnimal interface.

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

You need to ensure that the Mammal 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.

```
abstract class Mammal : IAnimal
{
    ...
}
```

☐ B.

```
sealed class Mammal : IAnimal
{
    ...
}
```

☐ C.

```
abstract class Mammal : Animal
{
    ...
}
```

☐ D.

```
sealed class Mammal : Animal
{
    ...
}
```

16.

You are developing a class named ExtensionMethods.

You need to ensure that the ExtensionMethods class implements the IsEmail() extension 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.)

Select and Place:

The screenshot shows a code editor interface with two panes. The left pane contains a list of code segments that can be dragged. The right pane shows a code template with a placeholder for the implementation of the IsEmail method.

Code segments available for dragging:

- `public static class ExtensionMethods`
- `public class ExtensionMethods`
- `this String str`
- `String str`
- `protected static class ExtensionMethods`

Code template in the right pane:

```
{  
    public static bool IsEmail(  
        [ ]  
    )  
{  
    var regex = new Regex(@"^([\w\.-]+)@  
    return regex.IsMatch(str);  
}
```

17.

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 items 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


```

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     }

```

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?

- 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))

19.

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. `WaitForFullGCCComplete()`
- B. `SuppressFinalize()`
- C. `collect()`
- D. `RemoveMemoryPressure()`

20.

You are implementing a method named `FloorTemperature` that performs conversions between value types and reference types. The following code segment implements the method. (Line numbers are included for reference only.)

```
01 public static void FloorTemperature(float degrees)
02 {
03     object degreesRef = degrees;
04
05     Console.WriteLine(result);
06 }
```

You need to ensure that the application does not throw exceptions on invalid conversions.

Which code segment should you insert at line 04?

- A. `int result = (int)degreesRef;`
- B. `int result = (int)(double)degreesRef;`
- C. `int result = degreesRef;`
- D. `int result = (int)(float)degreesRef;`

21.

You are creating an application that manages information about your company's products. The application includes a class named Product and a method named

.

Save -

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

You need to implement the Save() method.

Which code segment should you use?

```
public static void Save(Product target)
{
    ...
}
```

A.

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

B.

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

C.

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

D.

22.

You are creating a class named Employee. The class exposes a string property named EmployeeType. The following code segment defines the Employee class. (Line numbers are included for reference only.)

```
01 public class Employee
02 {
03     internal string EmployeeType
04     {
05         get;
06         set;
07     }
08 }
```

The EmployeeType property value must meet the following requirements:

The value must be accessed only by code within the Employee class or within a class derived from the Employee class.

The value must be modified only by code within the Employee class.

You need to ensure that the implementation of the EmployeeType property meets the requirements.

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

NOTE: Each correct selection is worth one point.

- A. Replace line 03 with the following code segment: public string EmployeeType
- B. Replace line 06 with the following code segment: protected set;
- C. Replace line 05 with the following code segment: private get;
- D. Replace line 05 with the following code segment: protected get;
- E. Replace line 03 with the following code segment: protected string EmployeeType
- F. Replace line 06 with the following code segment: private set;

23.

You have the following C# code.

```
StringBuilder sb = new StringBuilder(reallyLongString);
```

The reallyLongString variable is a string in which a very long string is stored.

You need to identify whether a string stored in an object named StringToFind is within the StringBuilder sb object.

Which code should you use?

- A. sb.Equals(stringToFind);
- B. sb.ToString().IndexOf(stringToFind);
- C. sb.ToString().CompareTo(stringToFind);
- D. sb.ToString().Substring(stringToFind.Length);

24.

You have the following code:

```
private static Dictionary<string, int> CreateTestData()
{
    Dictionary<string, int> dict = new Dictionary<string, int>()
    {
        {"Accounting", 1},
        {"Marketing", 2},
        {"Operations", 3}
    };
    return dict;
}

private static bool? FindInList(string searchTerm)
{
    Dictionary<string, int> data = CreateTestData();

    if (data.ContainsKey(searchTerm))
    {
        return true;
    }
    else
    {
        return false;
    }
}
```

If the search term is set to "Finance", the result will be ...

<input type="text"/>
false
true
null

If the search term is set to "1", the result will be ...

<input type="text"/>
false
true
null

If the search term is set to "Operations", the result will be ...

<input type="text"/>
false
true
null

25.

You are creating a class named Game.

The Game class must meet the following requirements:

-> Include a member that represents the score for a Game instance.

Allow external code to assign a value to the score member.

▪

-> Restrict the range of values that can be assigned to the score member.

You need to implement the score member to meet the requirements.

In which form should you implement the score member?

- A. protected field
- B. public static field
- C. public static property
- D. public property

26.

You are developing an application in C#.

The application will display the temperature and the time at which the temperature was recorded.

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

```
01 public void DisplayTemperature(DateTime date, double temp)
02 {
03     string output;
04
05     string lblMessage = output;
06 }
```

You need to ensure that the message displayed in the lblMessage object shows the time formatted according to the following requirements:

-> The time must be formatted as hour:minute AM/PM, for example 2:00 PM.

-> The date must be formatted as month/day/year, for example 04/21/2013.

-> The temperature must be formatted to have two decimal places, for example 23.45.

Which code should you insert at line 04? (To answer, select the appropriate options in the answer area.)

Hot Area:

output = string.Format("Temperature at

{0:t}
{1:t}
{0:hh:mm}
{1:hh:mm}

 on

{0:d}
{1:d}
{1:dd/mm/yyyy}
{0:mm/dd/yyyy}

 :

{0}
{1}
{0:N2}
{1:N2}

 ", date, temp);

27.

You are developing an application that uses several objects. The application includes the following code segment. (Line numbers are included for reference only.)

```
01 private bool IsNull(object obj)
02 {
03
04     return false;
05 }
```

You need to evaluate whether an object is null.

Which code segment should you insert at line 03?

A.

```
if (obj = null)
{
    return true;
}
```

B.

```
if (null)
{
    return true;
}
```

C.

```
if (obj == 0)
{
    return true;
}
```

D.

```
if (obj == null)
{
    return true;
}
```

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

28.

You are developing an application.

The application contains the following code segment (line numbers are included for reference only):

```
01 ArrayList array1 = new ArrayList();  
02 int var1 = 10;  
03 int var2;  
04 array1.Add(var1);  
05 var2 = array1[0];
```

When you run the code, you receive the following error message: "Cannot implicitly convert type 'object' to 'int'. An explicit conversion exists (are you missing a cast?)."

You need to ensure that the code can be compiled.

Which code should you use to replace line 05?

- A. `var2 = ((List<int>)array1)[0];`
- B. `var2 = (int)array1[0];`
- C. `var2 = int.Parse(array1[0]);`
- D. `var2 = array1[0] as int;`

29.

You are developing the following classes named:

-> Class1

-> Class2

-> Class3

All of the classes will be part of a single assembly named Assembly.dll. Assembly.dll will be used by multiple applications.

All of the classes will implement the following interface, which is also part of Assembly.dll:

```
public interface Interface1
{
    void Method1(decimal amount);
    void Method2(decimal amount);
}
```

You need to ensure that the Method2 method for the Class3 class can be executed only when instances of the class are accessed through the Interface1 interface. The solution must ensure that calls to the Method1 method can be made either through the interface or through an instance of the class.

Which signature should you use for each method? (To answer, select the appropriate signature for each method in the answer area.)

Hot Area:

Method1:

internal void Method1(decimal amount)
private void Method1(decimal amount)
public void Method1(decimal amount)
void Interface1.Method1(decimal amount)

Method2:

internal void Method2(decimal amount)
private void Method2(decimal amount)
public void Method2(decimal amount)
void Interface1. Method2 (decimal amount)

30.

You are developing an application that will be deployed to multiple computers. You set the assembly name.

You need to create a unique identity for the application assembly.

Which two assembly identity attributes should you include in the source code? (Each correct answer presents part of the solution. Choose two.)

- A.** AssemblyTitleAttribute
- B.** AssemblyCultureAttribute
- C.** AssemblyVersionAttribute
- D.** AssemblyKeyNameAttribute
- E.** AssemblyFileVersion
- F.** AssemblyProductAttribute
- G.** AssemblyDelaySignAttribute
- H.** AssemblyCompanyAttribute

31.

You are writing the following method (line numbers are included for reference only):

```
01 public T CreateObject<T>()  
02  
03 {  
04     T obj = new T();  
05     return obj;  
06 }
```

32.

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

```
01 public class ItemBase
02 {
03 }
04 public class Widget : ItemBase
05 {
06 }
07 class Worker
08 {
09     void DoWork(object obj)
10     {
11         Console.WriteLine("In DoWork(object)");
12     }
13     void DoWork(Widget widget)
14     {
15         Console.WriteLine("In DoWork(Widget)");
16     }
17     void DoWork(ItemBase itembase)
18     {
19         Console.WriteLine("In DoWork(ItemBase)");
20     }
21     private void Run()
22     {
23         object o = new Widget();
24         DoWork(o);
25     }
26 }
```

33.

You are developing code for an application that retrieves information about Microsoft .NET Framework assemblies.

The following code segment is part of the application (line numbers are included for reference only):

```
01 public void ViewMetadata(string filePath)
02 {
03     var bytes = File.ReadAllBytes(filePath);
04
05     ...
06 }
```

You need to insert code at line 04. The code must load the assembly. Once the assembly is loaded, the code must be able to read the assembly metadata, but the code must be denied access from executing code from the assembly.

Which code segment should you insert at line 04?

- A. `Assembly.ReflectionOnlyLoadFrom(bytes);`
- B. `Assembly.ReflectionOnlyLoad(bytes);`
- C. `Assembly.Load(bytes);`
- D. `Assembly.LoadFrom(bytes);`

34.

You need to create a method that can be called by using a varying number of parameters. What should you use?

- A. Method overloading
- B. Derived classes
- C. Named parameters
- D. Enumeration
- E. Interface
- F. Lambda expressions

35.

You are developing an application.

The application contains the following code segment (line numbers are included for reference only):

```
01 ArrayList array1 = new ArrayList();  
02 int var1 = 10;  
03 int var2;  
04 array1.Add(var1);  
05 var2 = array1[0];
```

When you run the code, you receive the following error message: "Cannot implicitly convert type 'object' to 'int'. An explicit conversion exists (are you missing a cast?)."

You need to ensure that the code can be compiled.

Which code should you use to replace line 05?

- A. var2 = ((List<int>) array1) [0];
- B. var2 = array1[0].Equals(typeof(int));
- C. var2 = Convert.ToInt32(array1[0]);
- D. var2 = ((int[])array1)[0];
- E. var2 = int.Parse(array1[0]);

36.

You are creating a class library that will be used in a web application.

You need to ensure that the class library assembly is strongly named.

What should you do?

- A. Use the gacutil.exe command-line tool.
- B. Use the xsd.exe command-line tool.
- C. Use the aspnet_regiis.exe command-line tool.
- D. Use assembly attributes.

37.

You need to store the values in a collection.

The solution must meet the following requirements:

-> The values must be stored in the order that they were added to the collection.

-> The values must be accessed in a first-in, first-out order.

Which type of collection should you use?

- A. SortedList
- B. Queue
- C. ArrayList
- D. Hashtable

38.

You are developing a game that allows players to collect from 0 through 1000 coins. You are creating a method that will be used in the game. The method includes the following code. (Line numbers are included for reference only.)

```
01 public string FormatCoins(string name, int coins)
02 {
04 }
```

The method must meet the following requirements:

- > Return a string that includes the player name and the number of coins.
- > Display the number of coins without leading zeros if the number is 1 or greater.
- > Display the number of coins as a single 0 if the number is 0.

You need to ensure that the method meets the requirements.

Which code segment should you insert at line 03?

- A. `return String.Format("Player {0}, collected {1} coins", name, coins.ToString("###0"));`
- B. `return String.Format("Player {0} collected {1:000#} coins.", name, coins);`
- C. `return String.Format("Player {name} collected {coins.ToString('000')} coins");`
- D. `return String.Format("Player {1} collected {2:D3} coins.", name, coins);`

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

39.

You are modifying an existing banking application.

The application includes an Account class and a Customer class. The following code segment defines the classes.

```
class Account
{
    public Account(decimal balance, int term, decimal rate)
    {
        Term = term;
        Balance = balance;
        Rate = rate;
    }
    public decimal Balance { get; set; }
    public decimal Rate { get; set; }
    public int Term { get; set; }
}

class Customer
{
    public Customer(string firstName, string lastName, Collection<Account> accounts)
    {
        FirstName = firstName;
        LastName = lastName;
        AccountCollection = accounts;
    }
    public string FirstName { get; set; }
    public string LastName { get; set; }
    public Collection<Account> AccountCollection { get; set; }
}
```

You populate a collection named customerCollection with Customer and Account objects by using the following code segment:

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

You create a largeCustomerAccounts collection to store the Account objects by using the following code segment:

```
Collection<Account> largeCustomerAccounts = new Collection<Account> ();
```

All accounts with a Balance value greater than or equal to 1,000,000 must be tracked.

You need to populate the largeCustomerAccounts collection with Account objects.

Which code segment should you use?

- A.

```
foreach (Customer customer in customerCollection)
{
    foreach (Account account in customer.AccountCollection)
    {
        if (account.Balance >= 10000000m)
        {
            customer.AccountCollection.Add(account);
        }
    }
}
```
- B.

```
foreach (Account customer in customerCollection)
{
    foreach (Account account in largeCustomerAccounts)
    {
        if (account.Balance >= 10000000m)
        {
            largeCustomerAccounts.Add(account);
        }
    }
}
```
- C.

```
foreach (Customer customer in customerCollection)
{
    foreach (Account account in customer.AccountCollection)
    {
        if (account.Balance >= 10000000m)
        {
            largeCustomerAccounts.Add(account);
        }
    }
}
```

40.

You are developing a C# console application that outputs information to the screen. The following code segments implement the two classes responsible for making calls to the Console object:

```
abstract class BaseLogger
{
    public virtual void Log(string message)
    {
        Console.WriteLine("Base: " + message);
    }
    public void LogCompleted()
    {
        Console.WriteLine("Completed");
    }
}

class Logger : BaseLogger
{
    public override void Log(string message)
    {
        Console.WriteLine(message);
    }
    public new void LogCompleted()
    {
        Console.WriteLine("Finished");
    }
}
```

When the application is run, the console output must be the following text:

Log started -

Base: Log continuing -

Finished -

You need to ensure that the application outputs the correct text.

Which four lines of code should you use in sequence? To answer, move the appropriate lines of code from the list of lines of code to the answer area and arrange them in the correct order.

Select and Place:



```
logger.Log("Base: Log continuing");
```

```
((BaseLogger)logger).Log("Log continuing");
```

```
var logger = new BaseLogger();
```

```
((Logger)logger).LogCompleted();
```

```
logger.Log("Log started");
```

```
BaseLogger logger = new Logger();
```

```
logger.LogCompleted();
```

41.

DRAG DROP -

You have the following C# code.

```
public class Vendor
{
    public double TotalPrice {get;set;}
}
public class Partner : Vendor{}
```

You create a function named `getDiscount` that has the following method signature. (Line numbers are included for reference only.)

```
01 public static double getDiscount(Vendor vendor)
02 {
03     switch(vendor)
04     {
05
06     }
07 }
```

You need to modify `getDiscount` to return the amount of the discount. The solution must meet the following requirements:

- > If the vendor object is a type of Partner object and TotalPrice is greater than 1,000, the discount must be 30 percent.
- > If the vendor object is a type of Partner object and TotalPrice is less than or equal to 1,000 the discount must be 20 percent
- > If the vendor object is NOT a type of Partner object, the discount must be 10 percent
- > If the vendor object is null, an exception must be raised

Which four code blocks should you use to complete the switch statement at line 05? To answer, move the appropriate code blocks from the list of code blocks to the answer area and arrange them in the correct order.

NOTE: Each correct selection is worth one point.

Select and Place:

Code Blocks

```
case Partner p:  
return p.TotalPrice * 0.70;
```

```
case Partner p when p.TotalPrice <=  
1000: return p.TotalPrice * 0.80;
```

```
case null: throw new  
ArgumentNullException(nameof  
(vendor));
```

```
case Vendor v when  
vendor.TotalPrice <= 1000: return  
v.TotalPrice * 0.80;
```

```
case Partner p when p.TotalPrice >  
1000: return p.TotalPrice * 0.80;
```

```
case Partner p when p is null:  
throw new  
ArgumentNullException(nameof(p));
```

```
case Vendor v: return v.TotalPrice  
* 0.90;
```

Answer Area

42.

You define a class by using the following code:

```
public class Class1 : IComparable<Class1>
{
    public Int32 ID { get; set; }
    public String Name { get; set; }
    public int CompareTo(Class1 other)
    {
        if(ID == other.ID) return 0;
        else return ID.CompareTo(other.ID);
    }
}
```

You write the following code for a method (line numbers are included for reference only):

```
01 List<Class1> list = new List<Class1>() {
02     new Class1() { ID = 5, Name = "User1" },
03     new Class1() { ID = 6, Name = "User2" },
04     new Class1() { ID = 3, Name = "User3" },
05     new Class1() { ID = 4, Name = "User4" }
06 };
07 Console.WriteLine(list.Count);
08 list.Sort();
09 Console.WriteLine(list[0].Name);
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the code.

NOTE: Each correct selection is worth one point.

Hot Area:

Line 07 of the method will display ...

0
1
2
3
4

Line 09 of the method will display ...

User1
User2
User3
User4

43.

You are evaluating a method that calculates loan interest. The application includes the following code segment. (Line numbers are included for reference only.)

```
01 private static decimal CalculateInterest(decimal loanAmount, int loanTerm)
02 {
03     decimal interestAmount;
04     decimal loanRate;
05     if (loanTerm > 0 && loanTerm < 5 && loanAmount < 5000m)
06     {
07         loanRate = 0.045m;
08     }
09     else if (loanTerm > 5 && loanAmount > 5000m)
10     {
11         loanRate = 0.085m;
12     }
13     else
14     {
15         loanRate = 0.055m;
16     }
17     interestAmount = loanAmount * loanRate * loanTerm;
18     return interestAmount;
19 }
```

When the loanTerm value is 3 and the loanAmount value is 9750, the loanRate must be set to 8.25 percent.

You need to adjust the loanRate value to meet the requirements.

What should you do?

- A. Replace line 04 with the following code segment: decimal loanRate = 0.0325m;
- B. Replace line 17 with the following code segment: interestAmount = loanAmount * 0.0825m * loanTerm;
- C. Replace line 15 with the following code segment: loanRate = 0.0825m;
- D. Replace line 07 with the following code segment: loanRate = 0.0825m;

44.

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

```
01 public string GenerateCode(string className, string methodName)
02 {
03     ...
04     var ct = new CodeTypeDeclaration(className);
05
06     ...
07 }
```

You need to ensure that code generated by the GenerateCode() method represents a class that can be accessed by all objects in its application domain.

Which two code segments can you insert at line 05 to achieve the goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. `ct.Attributes = MemberAttributes.Public;`
- B. `ct.IsStruct = true;`
`ct.Attributes = MemberAttributes.Public;`
- C. `ct.IsClass = true;`
`ct.Attributes = MemberAttributes.Public;`
- D. `ct.IsClass = true;`
`ct.Attributes = MemberAttributes.Private;`

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

45.

You develop a class named MyClass. MyClass has a method that uses a COM object. You need to ensure that when MyClass is instantiated by using the using keyword, the COM object is released at the end of the using scope. Which interface should you implement?

- A. `ISerializable`
- B. `IDisposable`
- C. `ICloneable`
- D. `IFormattable`