

1. 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];
        }
    }
    {
    }
}
```

2.

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;

3.

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

4.

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-z0-9-]*\\.)*([A-Za-z0-9-]*)" +
            "\\.[A-Za-z0-9-]*/*.*");
        return regex.IsMatch(str);
    }
}
```

5.

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()`

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`
`{`
 `...`
`}`

A. Option A

B. Option B

C. Option C

D. Option D

7.

You are developing a class named ExtensionMethods.

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

You have the following code:

```
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);
    }
}
```

Which code segments should you include in Target 1 and Target 2 to complete the code? (To answer, drag the appropriate code segments to the correct targets 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.)

NOTE: Each correct selection is worth one point.

Select and Place:

Code Segments

public static class ExtensionMethods

public class ExtensionMethods

this String str

String str

protected static class ExtensionMethods

Answer Area

Target 1: [

Target 2: [

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.

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();`

10.

You are implementing a library method that accepts a character parameter and returns a string.

If the lookup succeeds, the method must return the corresponding string value. If the lookup fails, the method must return the value "invalid choice."

You need to implement the lookup algorithm.

How should you complete the relevant code? (To answer, select the correct keyword in each drop-down list in the answer area.)

Hot Area:

Work Area

```
public string GetResponse(char letter)
{
```

```
    string response;
```

```
    (letter)
```

case

if

switch

```
{
```

```
    'a':
```

case

default

else

if

```
        response = "animal";
```

```
        break;
```

```
    'm':
```

case

default

else

if

```
        response = "mineral";
```

```
        break;
```

```
    :
```

case

default

else

if

```
        response = "invalid choice";
```


11.

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:

12.

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.

You have the following code:

```
public class LoanCollection Target 1
{
    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];
        }
    }
    Target 2
    {
        Target 3
    }
}
```

select and place:

Code Segments

: IComparable

: IEnumerable

: IDisposable

public IEnumerator
GetEnumerator()

public int
CompareTo(object obj)

public void Dispose()

_loanCollection[0].Amout++;

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

return _loanCollection.
GetEnumerator();



13.

You are creating a console application by using C#.

You need to access the assembly found in the file named car.dll.

Which code segment should you use?

- A.** `Assembly.Load();`
- B.** `Assembly.GetExecutingAssembly();`
- C.** `This.GetType();`
- D.** `Assembly.LoadFile("car.dll");`

14.

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()`

15.

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`

16.

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.AppendLine();

var sb = new StringBuilder();

sb.Append("First Line");

sb.Append("\t");

sb.AppendLine();

sb.Append(String.Empty);

sb.Append("Second Line");

17.

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
{
    ...
}
```

A. Option A

B. Option B

C. Option C

D. Option D

18.

DRAG DROP -

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 interface consists of two main panes. The left pane contains a list of code segments to be dragged:

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

The right pane shows a code editor with the following structure:

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

A blue rectangular box is positioned inside the `IsEmail` method signature, indicating the location where a code segment should be placed.

19.

You have the following C# code that manipulates a string.

```
string str = "This is a random sentence.";

string result = str.Substring(0,str.LastIndexOf("is")) +
str.Substring(str.IndexOf("random"));
```

What is the value of result after the code executes?

- A. This is a sentence.
- B. Thrandom random a random sentence.
- C. This is a is sentence.
- D. This random sentence.

20.

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()

21.

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;`

22.

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

```
01 double x, y;
02 x = 0.0;
03 y = 0.0;
04 Console.WriteLine(x/y);
```

What is the output of line 04?

- A. Error
- B. 0
- C. null
- D. NaN

23.

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.

24.

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;

25.

QUESTION

You have the following class:

```
public class Class1 : IEquatable<Class1>
{
    public Int32 ID { get; set; }
    public String Name { get; set; }
    public bool Equals(Class1 other)
    {
    }
}
```

You need to implement IEquatable. The Equals method must return true if both ID and Name are set to the identical values. Otherwise, the method must return false. Equals must not throw an exception.

What should you do? (Develop the solution by selecting and ordering the required code snippets. You may not need all of the code snippets.)

Select and Place:

if (!Object.Equals
(this.Name, other.Name)) return false;

if (this.ID == other.ID) return false;

return false;

return true;

if (other == null) return false;

break

if (this.ID != other.ID) return false;

if (!this.Name.Equals
(other.Name)) return false;

26.

You are reviewing the following code:

```
[System.FlagsAttribute()]
public enum Group
{
    Users = 1,
    Supervisors = 2,
    Managers = 4,
    Administrators = 8
}
public class User
{
    public Group UserGroup { get; set; }
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Hot Area:

	Yes	No
A user can be a member of more than one of the groups.	<input type="radio"/>	<input type="radio"/>
If the user belongs to only the Administrators group, the following code will return a value of true: user.UserGroup == Group.Administrators	<input type="radio"/>	<input type="radio"/>
If the user belongs to only the Supervisors group, the following code will return a value of true: user.UserGroup < Group.Administrators	<input type="radio"/>	<input type="radio"/>

27.

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

28.

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);

29.

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

30.

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;`

31.

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)	

32.

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 }
```

You need to ensure that CreateObject compiles successfully.

What should you do?

- A. Insert the following code at line 02: where T : new()
- B. Replace line 01 with the following code: public void CreateObject<T>()
- C. Replace line 01 with the following code: public Object CreateObject<T>()
- D. Insert the following code at line 02: where T : Object

33.

You are developing an application that will parse a large amount of text.

You need to parse the text into separate lines and minimize memory use while processing data.

Which object type should you use?

- A. DataContractSerializer
- B. StringBuilder
- C. StringReader
- D. JsonSerializer

34.

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 }
```

You need to ensure that the DoWork(Widget widget) method runs. With which code segment should you replace line 24?

- A. DoWork((Widget)o);
- B. DoWork(new Widget(o));
- C. DoWork(o is Widget);
- D. DoWork((ItemBase)o);

35.

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);`

36.

You are modifying an existing application that manages employee payroll. The application includes a class named `PayrollProcessor`. The `PayrollProcessor` class connects to a payroll database and processes batches of paychecks once a week. You need to ensure that the `PayrollProcessor` class supports iteration and releases database connections after the batch processing completes. Which two interfaces should you implement? (Each correct answer presents part of the complete solution. Choose two.)

- A.** `IEquatable`
- B.** `IEnumerable`
- C.** `IDisposable`
- D.** `IComparable`

37.

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

38.

You are building a data access layer in an application that contains the following code:

```
public static Object GetTypeDefault(DbType dbDataType)
{
    switch (dbDataType)
    {
        case DbType.Boolean:
            return false;
        case DbType.DateTime:
            return DateTime.MinValue;
        case DbType.Decimal:
            return 0m;
        case DbType.Int32:
            return 0;
        case DbType.String:
            return String.Empty;
        default:
            return null;
    }
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

	Yes	No
If dbDataType is DateTime, today's date is returned.	<input type="radio"/>	<input type="radio"/>
If dbDatatype is Int64, Null is returned.	<input type="radio"/>	<input type="radio"/>
If dbDatatype is Double, 0 is returned.	<input type="radio"/>	<input type="radio"/>

39.

HOTSPOT -

You have the following code:

```
public class Customer
{
    private int CustomerId    { get; set; }
    public string CompanyName { get; set; }
    protected string State    { get; set; }
    public string City         { get; set; }

    public Customer(int customerId, string companyName, string state, string city)
    {
        CustomerId = customerId;
        CompanyName = companyName;
        State = state;
        City = city;
    }
    public Customer() {}
}

public interface ICustomer
{
    string GetCustomerById(int customerId);
    string GetCustomerByDate(DateTime dateFrom, DateTime dateTo);
}

public class MyCustomerClass : Customer, ICustomer
{
    public string Zip { get; set; }
    public string Phone { get; set; }
    public string GetCustomerById(int customerId)
    {
        ...
    }
    public string GetCustomerByDate(DateTime dateFrom, DateTime dateTo)
    {
        ...
    }
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Hot Area:

	Yes	No
All of the objects derived from MyCustomerClass have CustomerID as a property.	<input type="radio"/>	<input type="radio"/>
All of the objects derived from MyCustomerClass have CompanyName as a property.	<input type="radio"/>	<input type="radio"/>
All of the objects derived from MyCustomerClass have State as a property.	<input type="radio"/>	<input type="radio"/>

40.

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]);`

41.

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);`

42.

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();

43.

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

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

46.

You have a method that will evaluate a parameter of type `Int32` named `Status`.

You need to ensure that the method meets the following requirements:

-> If `Status` is set to `Active`, the method must return 1.

-> If `Status` is set to `Inactive`, the method must return 0.

-> If `Status` is any other value, the method must return -1.

What should you do? (To answer, drag the appropriate statement to the correct location in the answer area. Each statement 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:

`break;`

`case "Active":`

`case "Inactive"`

`default:`

`goto default;`

`return`

```
Int32 returnStatus = Int32.MinValue;
```

```
switch (status) {
```

```
    Statement
```

```
    returnStatus = 1;
```

```
    Statement
```

```
    Statement
```

```
    returnStatus = 0;
```

```
    Statement
```

```
    Statement
```

```
    returnStatus = -1;
```

```
    Statement
```

```
}
```

```
return returnStatus;
```


47.

You are developing an application that includes a method named `SendMessage`. You need to ensure that the `SendMessage()` method is called with the required parameters.

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

NOTE: Each correct selection is worth one point.

- A.

```
static void Main(string[] args)
{
    dynamic message = new { From = "Jon Morris", To = "Mary North", Content = "Hello World" };
    SendMessage(message);
}

private static void SendMessage(Object msg)
{
    Console.WriteLine(msg.From);
    Console.WriteLine(msg.To);
    Console.WriteLine(msg.Content);
}
```
- B.

```
static void Main(string[] args)
{
    var message = new Object();
    message.From = "Jon Morris";
    message.To = "Mary North";
    message.Content = "Hello World";
    SendMessage(message);
}

private static void SendMessage(dynamic msg)
{
    Console.WriteLine(msg.From);
    Console.WriteLine(msg.To);
    Console.WriteLine(msg.Content);
}
```
- C.

```
static void Main(string[] args)
{
    var message = new { From = "Jon Morris", To = "Mary North", Content = "Hello World" };
    SendMessage(message);
}

private static void SendMessage(dynamic msg)
{
    Console.WriteLine(msg.From);
    Console.WriteLine(msg.To);
    Console.WriteLine(msg.Content);
}
```
- D.

```
static void Main(string[] args)
{
    dynamic message = new ExpandoObject();
    message.From = "Jon Morris";
    message.To = "Mary North";
    message.Content = "Hello World";
    SendMessage(message);
}

private static void SendMessage(dynamic msg)
{
    Console.WriteLine(msg.From);
    Console.WriteLine(msg.To);
    Console.WriteLine(msg.Content);
}
```

48.

You are developing an application that includes methods named `ConvertAmount` and `TransferFunds`.

You need to ensure that the precision and range of the value in the amount variable is not lost when the `TransferFunds()` method is called.

Which code segment should you use?

A.

```
private static void ConvertAmount(float amount)
{
    TransferFunds(amount);
}
private static void TransferFunds(int funds)
{
    ...
    Console.WriteLine(funds);
}
```

B.

```
private static void ConvertAmount(float amount)
{
    TransferFunds((int)funds);
}
private static void TransferFunds(float funds)
{
    ...
}
```

C.

```
private static void ConvertAmount(float amount)
{
    TransferFunds(amount);
}
private static void TransferFunds(float funds)
{
    ...
}
```

49.

You are creating a class named Loan.

The Loan class must meet the following requirements:

- > Include a member that represents the rate for a Loan instance.
- > Allow external code to assign a value to the rate member.
- > Restrict the range of values that can be assigned to the rate member.

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

In which form should you implement the rate member?

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

50.

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 5 and the loanAmount value is 4500, the loanRate must be set to 6.5 percent.

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

What should you do?

- A. Replace line 15 with the following code segment: loanRate = 0.065m;
- B. Replace line 07 with the following code segment: loanRate = 0.065m;
- C. Replace line 17 with the following code segment: interestAmount = loanAmount * 0.065m * loanTerm;
- D. Replace line 04 with the following code segment: decimal loanRate = 0.065m;