

Question 01

1. Consider the following Graphical User Interface(GUI) and identify 03 components used
→Text box , Radio button, checkbox, group box, label
2. Write any 2 properties of the above controls
→Radio button, checkbox, Textbox
3. Write the code to add the city "Delhi" to the list.

```
1 reference
private void btnAdd_Click(object sender, EventArgs e)
{
    string[] citys = { "Mumbai", "Bangalore", "Hydrabad", "Delhi" };
    listBox1.Items.AddRange(citys);
}
```

4. Write the c# code to calculate the area of a circle for a given radius r.

```
using System;

namespace Q01_4
{
    0 references
    internal class Program
    {
        0 references
        static void Main(string[] args)
        {
            double pi = 3.14;

            Console.WriteLine("Enter the radius");
            double r=double.Parse(Console.ReadLine());

            Console.WriteLine(" Area= " + pi * r*r);

            Console.ReadLine();
        }
    }
}
```

Question 02

1-

```
1 reference
private void btnConvert_Click(object sender, EventArgs e)
{
    if (rdoFahr.Checked)
    {
        double c = Convert.ToDouble(txtTemp.Text);
        txtEquals.Text = Convert.ToString((c * 1.8) + 32);
    }
    else if (rdoCelsius.Checked)
    {
        double f = Convert.ToDouble(txtTemp.Text);
        txtEquals.Text = Convert.ToString((f - 32) * 5 / 9);
    }
}

1 reference
private void btnReset_Click(object sender, EventArgs e)
{
    txtEquals.Clear();
    txtTemp.Clear();
    rdoFahr.Checked = false;
    rdoCelsius.Checked = false;
}

1 reference
private void btnExit_Click(object sender, EventArgs e)
{
    Application.Exit();
}
```

Question 03

1- Language Translators translate the source code to machine code

Ex: Compiler, interpreter

2-Java, C++, Vb

3- can store multiple values in single variable of same type.

it is used to store the collection of data.

4-

a.

```
for (int i = 2; i < 20; i += 3)
{
    if (i == 8)
    {
        break;
    }
    Console.WriteLine(i);
}
```

C:\Users\Hi\Desktop\Model Paper VAP\Q03_4\Q03_4\bin\Debug\Q03_4.exe

2
5

b.

```
int n = 0;
while (n <= 15)
{
    Console.WriteLine(n.ToString());
    n += 1; //n=n+1; or n++;
}
```

C:\Users\Hi\Desktop\Model Paper VAP\Q03_4\Q03_4\bin\Debug\Q03_4.exe

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

c.

```
int counter = 10;
do
{
    Console.WriteLine($"Hello World!" + counter);
    counter++;
} while (counter <= 3);
```

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Hello World!10

5. Consider the following expressions and write their outputs

- a. `Console.WriteLine((2.0 - 2.0) / 4);`

```
//a.  
Console.WriteLine((2.0 - 2.0) / 4);
```

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0

b. Console.WriteLine((12>3) || (4>15));

```
//b.  
Console.WriteLine((12 > 3) || (4 > 15));
```

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True

c. `int num = 10;`
`Console.WriteLine(--num);`
`Console.WriteLine(++num);`
`Console.WriteLine(num);`
`Console.WriteLine(num++);`

```
//c.  
int num = 10;  
Console.WriteLine(--num);  
Console.WriteLine(++num);  
Console.WriteLine(num);  
Console.WriteLine(num++);
```

C:\Users\Hi\Desktop\Model Paper VAP\Q03_5\Q03_5\bin\Debug\Q03_5.exe

9
10
10
10

Question 04

1. CLR stands for Common Language Runtime and it is the foundation of the .NET framework.

The CLR is responsible for managing the execution of .NET applications, providing services such as memory management, type safety, security, and exception handling. It acts as a runtime environment for executing compiled code, and it also serves as an interface between the .NET applications and the operating system.

2.

- variable contain a-z or A-Z, 1-9.
- name are case sensitive.
- must start with letter.
- cannot use C# keywords as a variable.
- cannot put white space.

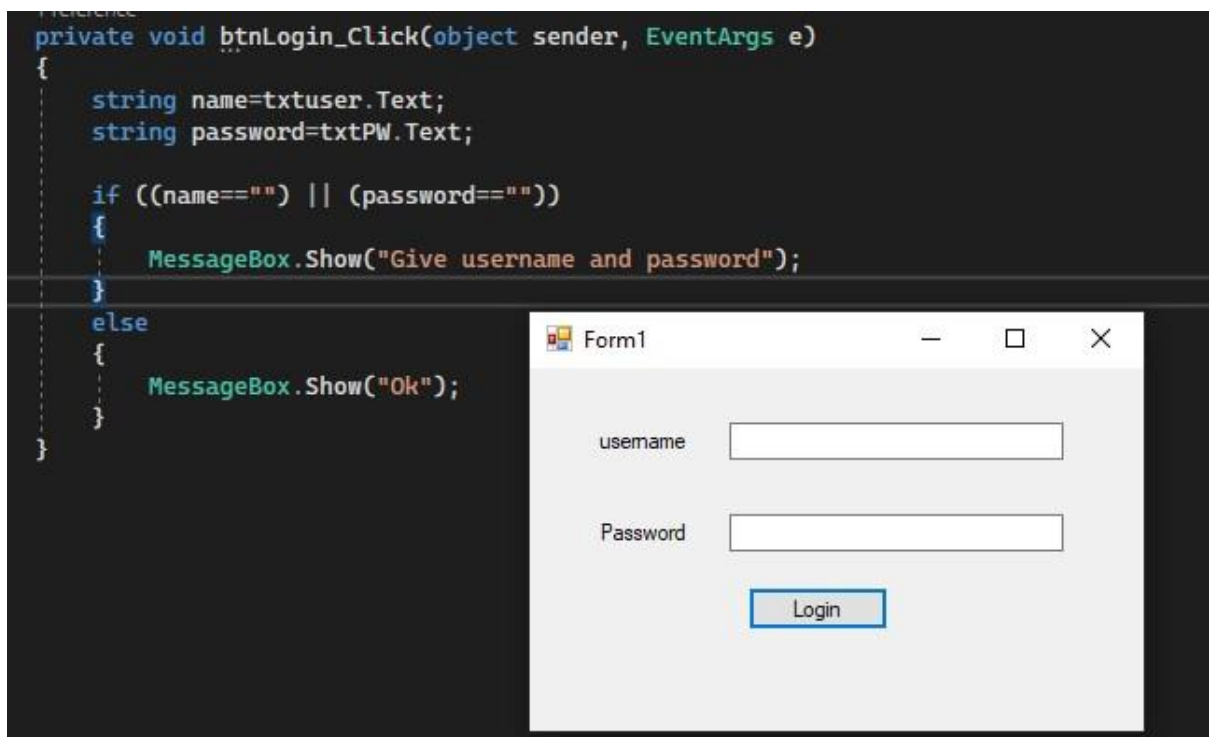
- can use underscore indeed the white space.

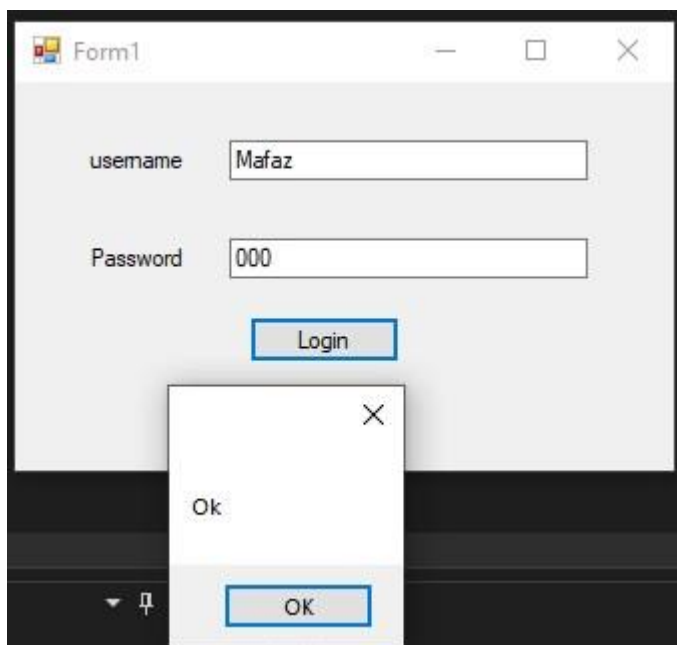
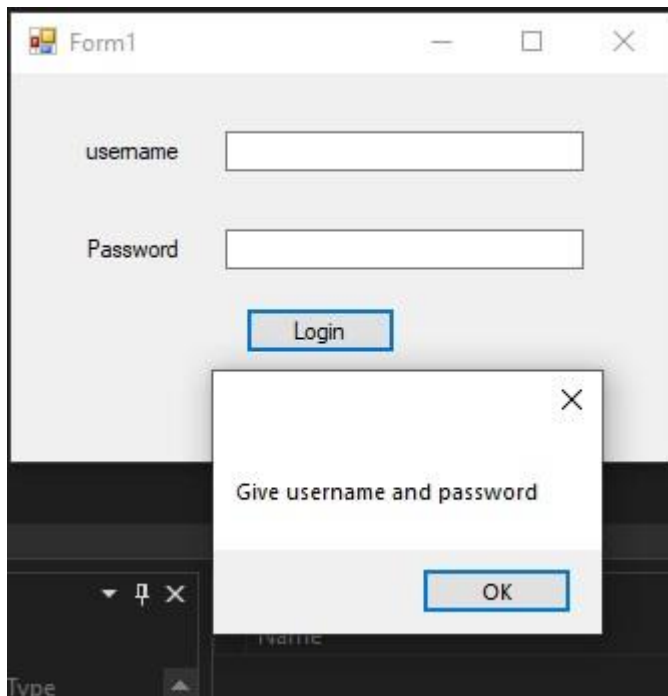
3. Single line comments

//IT IS SINGLE LINE

Multi line comment

```
/*it  
is  
multi  
line  
comments*/
```





Question 05

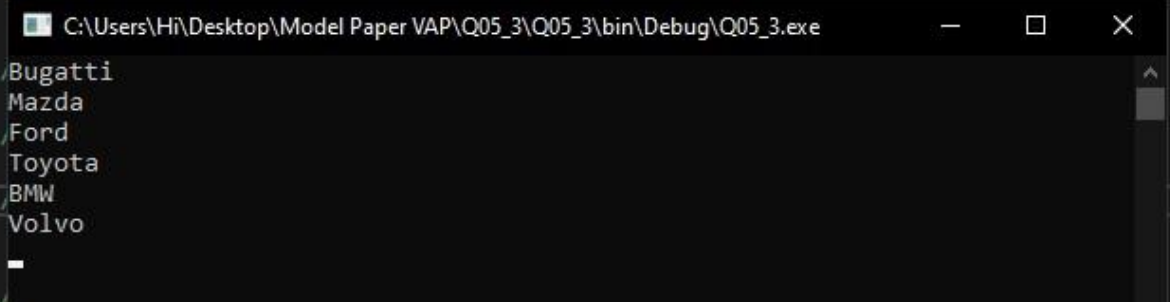
1. Provide data for the specific event in C# application.
2. Mouse events , keyboard events, windows events, timer events

3. a.

```
String[] cars = { "Volvo", "BMW", "Toyota", "Ford", "Mazda", "Bugatti" };

//a.

for (int a = cars.Length - 1; a >= 0; a--)
{
    Console.Write(cars[a] + "\n");
}
```



b.

```
String[] cars = { "Volvo", "BMW", "Toyota", "Ford", "Mazda", "Bugatti" };

//a.

/*for (int a = cars.Length - 1; a >= 0; a--)
{
    Console.Write(cars[a] + "\n");
}*/

//b.

cars[3] = "Nissan";
for (int a = 0; a < cars.Length; a += 2) //a=a+2
{
    Console.Write(cars[a] + "\n");
}
```

