

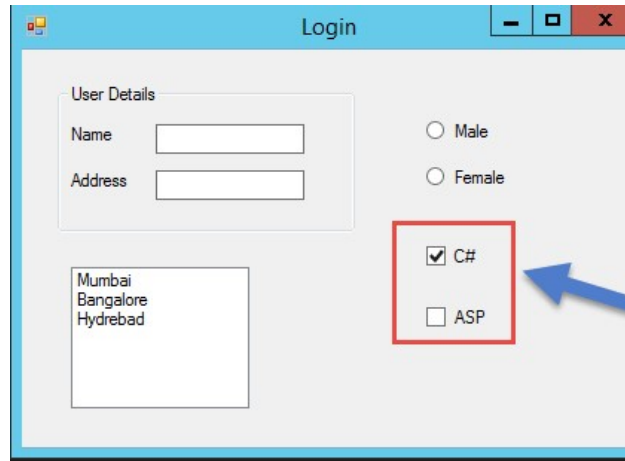
Model Paper - HNDIT1012 – Visual Application Programming

Instructions for Candidates:
Answer five questions only.
All questions carry equal marks.

No. of questions : 06
No. of pages : 06
Time : Three hours:

Question 01

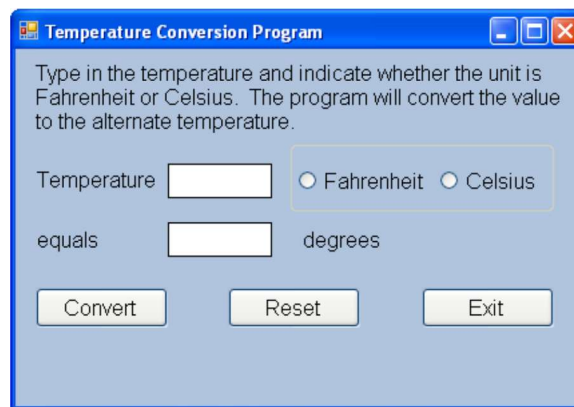
1. Consider the following Graphical User Interface(GUI) and identify 03 components used (03 Marks)



2. Write any 2 properties of the above controls (04 Marks)
3. Write the code to add the city “Delhi” to the list. (05 Marks)
4. Write the c# code to calculate the area of a circle for a given radius r. (08 Marks)

Question 02

1. Following application will convert temperature between Celsius and Fahrenheit



Write the code to convert, Reset and Exit Buttons

(20 Marks)

Question 03

1. Define the term “Language Translators”. (03 Marks)
2. State two examples for compilers (02 Marks)
3. What is the purpose of Array in C# (02 Marks)
4. Write the outputs of the following codes (06 Marks)

- a.


```

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

```
- b.


```

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

```
- c.


```

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

```

5. Consider the following expressions and write their outputs

(07 Marks)

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

(01 Mark)

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

(02 Marks)

c.

(04 Marks)

```

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

```

Question 04

1. Briefly explain the term CLR in .NET framework (03 Marks)
2. State two best practices for naming variables? (04 Marks)
3. State examples for single line comments and multi line comments in C# (05 Marks)

Draw a GUI layout for a login form and when click on login button write coding to check both username and passwords are not empty. If any textbox is empty, the program will show a message box "Give username and password" otherwise program will show a message box "OK". (08 Marks)

Question 05

1. Define the term "Event" in a C# application (02 Marks)
2. State any 3 events in C# (04 Marks)
3. Write the output of the following commands (04 Marks)

a.

```

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

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)  
{  
    Console.Write(cars[a] + "\n");  
}
```

4. Briefly explain the purpose of the below code using a suitable drawing. (05 Marks)

```
public void DrawEllipseInt(PaintEventArgs e)  
{  
    e.Graphics.DrawLine(new Pen(Color.Black, 3) , 100, 100, 300, 100);  
}
```

5. Explain the term “Syntax error”. (05 Marks)

Question 06

1. Draw a form layout to open and read a text file and display the contents on a rich text box. (04 Marks)
2. Write a c# code to open an OpenFileDialog when user clicks on open button. (08 Marks)
3. Write c# code to display the contents of the text file on a RichText Box (08 Marks)