

VISUAL PROGRAMMING THROUGH C#.NET

Q1.WonderWorks Magic Show

The Magic Castle, the home of the Academy of Magical Arts at California has organized the great 'WonderWorks Magic Show'. 3 renowned magicians were invited to mystify and thrill the crowd with their world's spectacular magic tricks. At the end of each of the 3 magicians' shows, the audience were requested to give their feedback in a scale of 1 to 10. Number of people who watched each show and the average feedback rating of each show is known. Write a program to find the average feedback rating of the WonderWorks Magic show.

Input Format:

First line of the input is an integer value that corresponds to the number of people who watched show 1.

Second line of the input is a float value that corresponds to the average rating of show 1.

Third line of the input is an integer value that corresponds to the number of people who watched show 2.

Fourth line of the input is a float value that corresponds to the average rating of show 2.

Fifth line of the input is an integer value that corresponds to the number of people who watched show 3.

Sixth line of the input is a float value that corresponds to the average rating of show 3.

Output Format:

Output should display the overall average rating for the show. Display the rating correct to 2 decimal places.

Refer sample input and output for formatting specifications.

[All text in bold corresponds to input and rest corresponds to output.]

Sample Input and Output:

Enter the number of people who watched show 1

400

Enter the average rating for show 1

9.8

Enter the number of people who watched show 2

500

Enter the average rating for show 2

9.6

Enter the number of people who watched show 3

100

Enter the average rating for show 3

5

The overall average rating for the show is 9.22

Q2:

Enter college name

CVR

Enter college locality

VasthuNagar

Enter college's vision

EnrichingStudentMinds

Enter college's mission

ActivityBasedLearning

Enter the number of departments

7

Enter student strength

5200

Enter college rating

A

OUTPUT

CVR

VasthuNagar

Vision

EnrichingStudentMinds

Mission

ActivityBasedLearning

Number of departments

7

Student Strength

5000

College Rating

A

Q3: Write a program to compute the sale in the 6th month.

Input Format:

Input consists of 5 integers and 1 float. The five integers correspond to s1, s2, s3, s4 and s5. The float input corresponds to x.

Output Format:

Refer sample input and output for formatting specifications.

The float values are displayed correct to 2 decimal places.

Sample Input and Output:

[All text in bold corresponds to input and the rest corresponds to output]

Enter sale in first month

6435

Enter sale in second month

6927

Enter sale in third month

6855

Enter sale in fourth month

7230

Enter sale in fifth month

6562

Enter the average sales in 6 months

6500

The sale in the sixth month is Rs.4991.00

Q5: Splitting into Teams

During the Physical Education hour, PD sir Mr. Sundar has decided to conduct some team games. He wants to split the students in the class into equal sized teams. In some cases, there may be some students who are left out from teams and he wanted to use the left out students to assist him in conducting the team games.

For instance, if there are 50 students in the class and if the class has to be divided into 7 equal sized teams, 7 students will be there in each team and 1 student will be left out.

PD sir asks your help to automate this team splitting task. Can you please help him out?

Input Format:

Input consists of 2 integers. The first integer corresponds to the number of students in the class and the second integer corresponds to the number of teams.

Output Format:

Refer sample input and output for formatting specifications.

Sample Input and Output:

[All text in bold corresponds to input and the rest corresponds to output]

Enter the number of students in the class

60

Enter the number of teams

8

The number of students in each team is 7 and the number of students left out is 4

Q6: FENCING THE GROUND

The college ground is rectangular in shape. The Management decides to build a fence around the ground. In order to help the construction workers to build a straight fence, they planned to place a thick rope around the ground. They wanted to buy only the exact length of the rope that is needed. They also wanted to cover the entire ground with a thick carpet during rainy season. They wanted to buy only the exact quantity of carpet that is needed. They requested your help.

Can you please help them by writing a program to find the exact length of the rope and the exact quantity of carpet that is needed?

Input Format:

Input consists of 2 integers. The first integer corresponds to the length of the ground and the second integer corresponds to the breadth of the ground.

Output Format:

Refer Sample Input and Output for exact formatting specifications.

Sample Input and Output:

[All text in bold corresponds to input and the rest corresponds to output]

Enter the length of the ground

50

Enter the width of the ground

20

The length of the rope needed is 140m

The quantity of carpet needed is 1000sqm

Q7: FOUR SEASONERS

Dinesh also joined the group of 3 idiots and now their group is called Four Seasoners. Meanwhile, Binoy has moved to a new house in the same locality. Now the houses of Ajay, Binoy and Chandru are located in the shape of a triangle. Dinesh also has moved to a house in the same locality. When Ajay asked Dinesh about the location of his house, Dinesh said that his house is equidistant from the houses of the other 3. Though Ajay was good in Mathematics, he was puzzled. Can you please help Ajay out?

Given the 3 vertices $\{(x_1, y_1), (x_2, y_2) \text{ and } (x_3, y_3)\}$ of a triangle, write a program to determine the point which is the centroid for the 3 vertices.

Input Format:

Input consists of 6 integers. The first integer corresponds to x_1 . The second integer corresponds to y_1 . The third and fourth integers correspond to x_2 and y_2 respectively.

The fifth and sixth integers correspond to x_3 and y_3 respectively.

Output Format:

Refer Sample Input and Output for exact formatting specifications.

[All floating point values are displayed correct to 1 decimal place]

Sample Input and Output:

[All text in bold corresponds to input and the rest corresponds to output]

Enter x1

2

Enter y1

4

Enter x2

10

Enter y2

15

Enter x3

5

Enter y3

8

Dinesh's house is located at (5.7 , 9.0)

Note:use ToString("0.0")

Q8:

Ajay, Binoy and Chandru were very close friends at school. They were very good in Mathematics and they were the pet students of Emily Mam. Their gang was known as 3-idiot. Ajay, Binoy and Chandru live in the same locality.

A new student Dinesh joins their class and he wanted to be friends with them. He asked Binoy about his house address. Binoy wanted to test Dinesh's mathematical skills. Binoy told Dinesh that his house is at the midpoint of the line joining Ajay's house and Chandru's house. Dinesh was puzzled. Can you help Dinesh out?

Given the coordinates of the 2 end points of a line (x_1, y_1) and (x_2, y_2) , write a program to find the midpoint of the line.

Input Format:

Input consists of 4 integers. The first integer corresponds to x_1 . The second integer corresponds to y_1 . The third and fourth integers correspond to x_2 and y_2 respectively.

Output Format:

Refer Sample Input and Output for exact formatting specifications.

[All floating point values are displayed correct to 1 decimal place]

Sample Input and Output:

[All text in bold corresponds to input and the rest corresponds to output]

Enter x_1

2

Enter y_1

4

Enter x_2

10

Enter y_2

15

Binoy's house is located at (6.0 , 9.5)

Q9: Write a Program that asks the user to enter a floating point number and to print its value.

Refer Sample Input and Output for formatting specifications. Print the floating point value correct to 2 decimal places.

Enter a floating point number

56.672

You entered 56.67

note use:ToSingle

```
String.Format("{0:0.00}")
```

Q10.write a program to feed the basic information into the You.

Enter the Name :

Chitti

Enter the Creator Name :

Dr.Vasegran

Enter the Purpose :

militaryservice

Memory Space :

22

Speed :

1.1

My Details :

I am the Robot named Chitti.

I was created by Dr.Vasegran.

I am created for the purpose of militaryservice.

My memory space is around 22Gb and my speed is 1.1Tb

1.Predict the output

```
using System;

public class Program
{
    public static void Main(string[] args)
    {
        int a = 3, b = 5, c = 1;

        int result = Convert.ToInt32(Convert.ToBoolean(a) && Convert.ToBoolean(b));
        int result1 = Convert.ToInt32(Convert.ToBoolean(result) || Convert.ToBoolean(c));
        Console.WriteLine("{0},{1}",result,result1);
    }
}
```

2.Identify the output.

```
using System;

class Program
{
    static void Main(string[] args)
    {
        byte a = 10;
        byte b = 20;
        long c = a | b;
        a = 20;
        b = 20;
        long d = a | b;
        Console.WriteLine("{0},{1}", c, d);
    }
}
```

3. Identify the output.

```
using System;

class Program
{
    static void Main(string[] args)
    {
        int a = 3, b = 5, c = 1;
        int z = ++b;
        int y = ++c;
        b = Convert.ToInt32((Convert.ToBoolean(z)) && (Convert.ToBoolean(y)));
        Console.WriteLine("{0},{1},{2}",a,b,c);
    }
}
```

4. Predict the output.

```
Using System;

class Program
{
    static void Main(string[] args)
    {
        long num1 = 200;
        long num2 = 500;
        int total;
        total = num1 + num2;
        Console.WriteLine(total);
    }
}
```

5.Predict the output.

```
using System;
class Program
{
    public static void Main(string[] args)
    {
        bool m = true;
        bool n = false;
        m |= n;
        Console.WriteLine(m);
    }
}
```

6.Predict the output.

```
using System;
class Program
{
    static void Main(string[] args)
    {
        float a = 16.4f;
        int b = 12;
        float c;
        c = a * b + a / (a - b) ;
        Console.WriteLine(c);
        Console.ReadLine();
    }
}
```

*****THANK YOU*****