

ASSIGNMENT NO 2:

Assignment Of:

Game developement

Submitted By:

Rimsha Bilal

Submitted To:

Ali Sher Kashif

Registration No:

FA17-BCS- 062

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Comsats University Islamabad

(Sahiwal Compus)



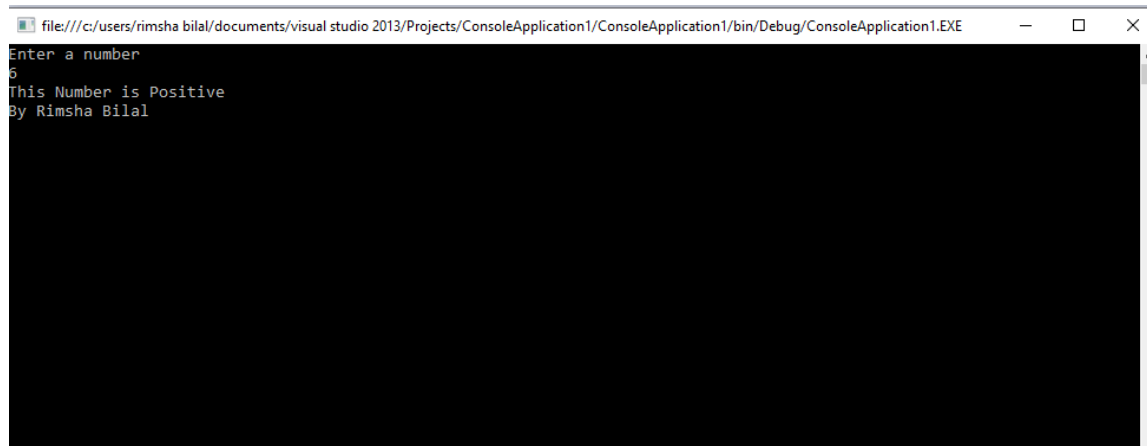
Question#01

Print Positive Number

Solution:

```
using System;
namespace Assignment2_1{
class PositiveNumber{
    static void Main(string[] args){
        int number;
        Console.WriteLine("Enter a number");
        number = Convert.ToInt32(Console.ReadLine());
        if (number > 0){Console.WriteLine("This Number is Positive");}
        else if (number < 0){Console.WriteLine("This Number is negative");}
        else{Console.WriteLine("This Number is zero");}
        Console.WriteLine("By Rimsha Bilal");
        Console.ReadLine();
    }
}
}
```

OUTPUT:

A screenshot of a Windows console application window. The title bar shows the file path: file:///c:/users/rimsha bilal/documents/visual studio 2013/Projects/ConsoleApplication1/ConsoleApplication1/bin/Debug/ConsoleApplication1.EXE. The console output is as follows:
Enter a number
5
This Number is Positive
By Rimsha Bilal
The console window has a black background with white text. The input '5' is on the second line, and the subsequent output messages are on the following lines.

Question#02

Display number with its Reverse Order

Solution:

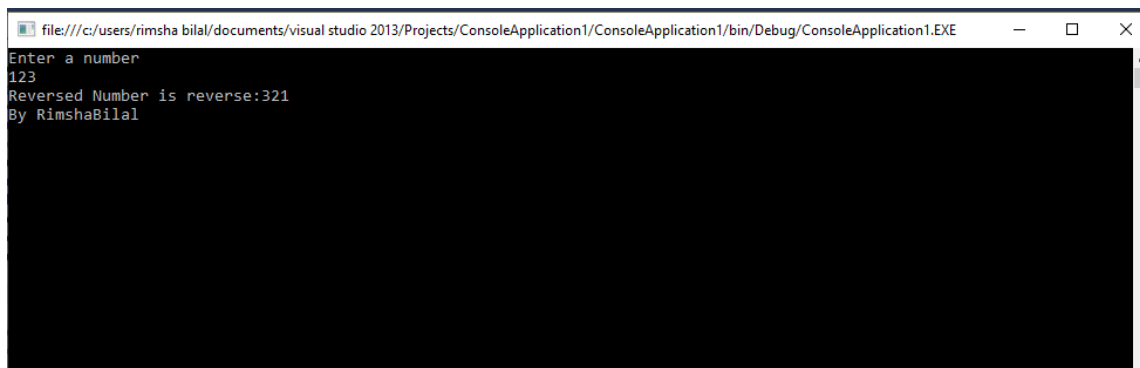
```
using System;
namespace ReverseOrder{
    class Program{
        static void Main(string[] args){
            int number,remainder;
            Console.WriteLine("Enter a number");
            number = Convert.ToInt32(Console.ReadLine());
            int reverse = 0;
            while(number!=0){

                reminder = number%10;
                reverse=reverse*10+reminder;
                number=number/10;

            }

            Console.WriteLine("Reversed Number is reverse:{0}", reverse);
            Console.WriteLine("By Rimsha Bilal");
            Console.ReadLine();
        }
    }
}
```

OUTPUT:

A screenshot of a Windows console application window. The title bar shows the file path: file:///c:/users/rimsha bilal/documents/visual studio 2013/Projects/ConsoleApplication1/ConsoleApplication1/bin/Debug/ConsoleApplication1.EXE. The console output is as follows:
Enter a number
123
Reversed Number is reverse:321
By RimshaBilal

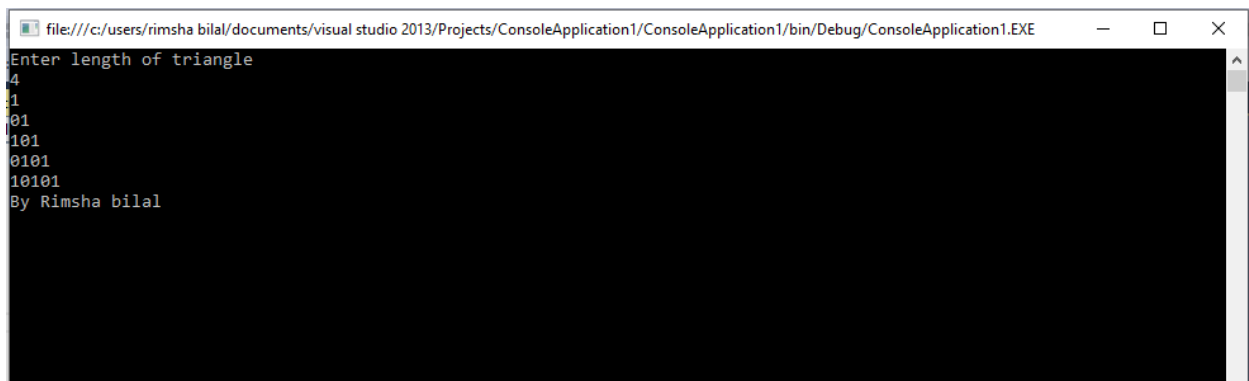
Question#03

Display Binary Triangle

Solution:

```
using System;
namespace PrintBinaryTriangle{
    class Program{
        static void Main(string[] args){
            int length;
            Console.WriteLine("Enter length of triangle");
            length = Convert.ToInt32(Console.ReadLine());
            for (int i = 0; i <= length; i++){
                for (int j = 0; j <= i; j++){
                    if ((i+j) % 2 == 0) { Console.Write("1"); }
                    else { Console.Write("0"); }
                }
                Console.WriteLine();
            }
            Console.WriteLine("By Rimsha Bilal");
            Console.ReadLine();
        }
    }
}
```

OUTPUT:



```
file:///c:/users/rimsha bilal/documents/visual studio 2013/Projects/ConsoleApplication1/ConsoleApplication1/bin/Debug/ConsoleApplication1.EXE
Enter length of triangle
4
1
01
101
0101
10101
By Rimsha bilal
```

Question#04

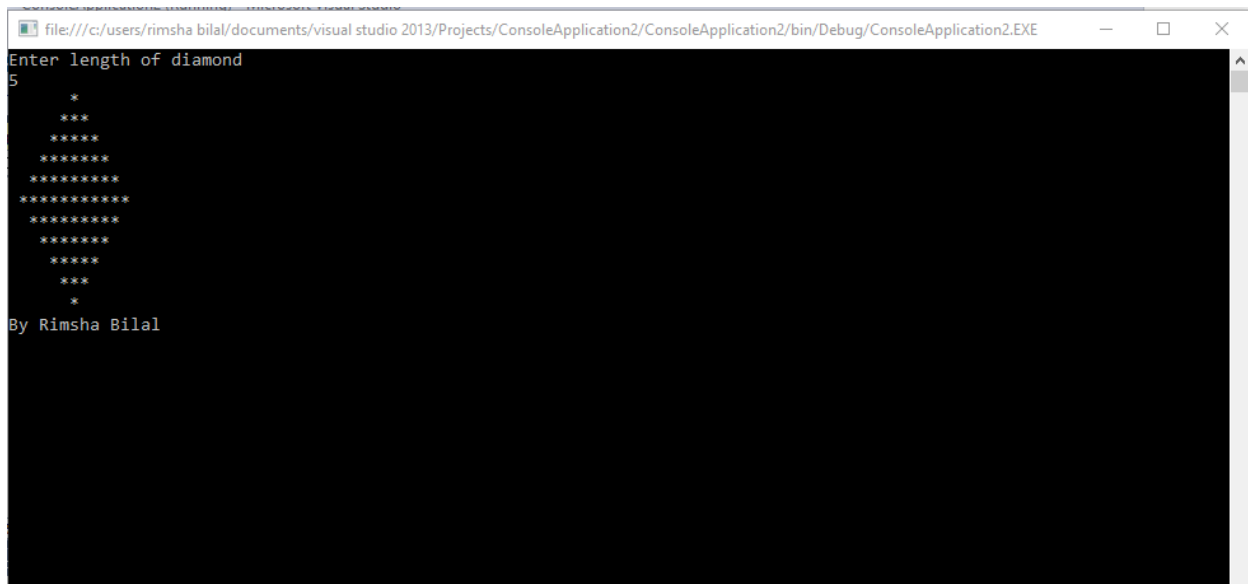
Print Diamond Using nested loop

Solution:

```
using System;
namespace DiamondUsingNestedLoop{
    class Program{
        static void Main(string[] args){
            int length;
            Console.WriteLine("Enter length of diamond");
```

```
length = Convert.ToInt32(Console.ReadLine());
for (int i = 0; i <= length; i++){
    for (int s = length; s >= i; s--) {
        Console.Write(" ");
    }
    for (int j = 0; j <= (2 * i); j++){
        Console.Write("*");
    }
    Console.WriteLine();
}
int count = 1;
for (int i = 0; i <= length-1; i++){
    for (int s = 0; s <= count; s++) {
        Console.Write(" ");
    }
    count++;
    for (int j = 1; j <= 2 *(length-i) - 1; j++){
        Console.Write("*");
    }
    Console.WriteLine();
}
Console.WriteLine("By Rimsha Bilal");
Console.ReadLine();
}
```

OUTPUT:



```
file:///c:/users/rimsha bilal/documents/visual studio 2013/Projects/ConsoleApplication2/ConsoleApplication2/bin/Debug/ConsoleApplication2.EXE
Enter length of diamond
5
  *
 ***
*****
*****
*****
*****
*****
  *
 ***
  *
By Rimsha Bilal
```

Question#05

Merge two arrays of same size sorted in ascending order

Solution:

```
using System;
namespace MergeTwoArrays
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter length of arrays");
            int n;
            n = Convert.ToInt32(Console.ReadLine());
            int[] array1 = new int[n];
            int[] array2 = new int[n];
            int length = 2 * n;
            int[] array3 = new int[length];
            int count = 0, j = 0;
            Console.WriteLine("Enter values in array 1");
            for (int i = 0; i < n; i++)
            {
                array1[i] = Convert.ToInt32(Console.ReadLine());
            }

            Console.WriteLine("Enter values in array2");
            for (int i = 0; i < n; i++)
            {
                array2[i] = Convert.ToInt32(Console.ReadLine());
            }
            while (j < n)
            {
                array3[count] = array1[j];
                count++;
                j++;
            }
            int k = 0;
            while (k < n)
            {
                array3[count] = array2[k];
                count++;
            }
        }
    }
}
```

```
        k++;
    }
    //sort array in ascending order
    for (int i = 0; i < length; i++)
    {
        for (k = 0; k < length - 1; k++)
        {

            if (array3[k] >= array3[k + 1])
            {
                j = array3[k + 1];
                array3[k + 1] = array3[k];
                array3[k] = j;
            }
        }
    }
    Console.WriteLine("merge Array is");
    for (int i = 0; i < length; i++)
    {
        Console.WriteLine(array3[i]);
    }
    Console.WriteLine("By Rimsha Bilal");
    Console.ReadLine();
}
}
```

Output:



```
file:///c:/users/rimsha bilal/documents/visual studio 2013/Projects/ConsoleApplication5/ConsoleApplication5/bin/Debug/ConsoleApplication5.EXE
Enter length of arrays
4
Enter values in array 1
2
0
7
6
Enter values in array2
5
66
4
1
merge Array is
0
1
2
4
5
6
7
66
By Rimsha Bilal
```