

Muhammad Waleed
20b-115-se
SE-B
Web Engineering
Lab#04

Task 1:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApplication1
{
    class Program
    {
        static double area_of_circle(double radius)
        {
            return Math.PI * (Math.Pow(radius, 2));
        }
        static double area_of_triangle(double height, double baseOfTri)
        {
            return (height * baseOfTri) / 2;
        }
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Radius: ");
            double radius = Convert.ToDouble(Console.ReadLine());
            Console.WriteLine("Area of Circle: {0}", area_of_circle(radius));

            Console.WriteLine("Enter Height: ");
            double height = Convert.ToDouble(Console.ReadLine());
            Console.WriteLine("Enter Base: ");
            double baseOfTri = Convert.ToDouble(Console.ReadLine());
            Console.WriteLine("Area of Triangle: {0}",
area_of_triangle(height, baseOfTri));

            Console.ReadKey();
        }
    }
}
```

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Task 2:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApplication1
{
    class Program
    {
        static double calculator(double a, String op, double b)
        {
            if (op == "+")
            {
                return a + b;
            }
            else if (op == "-")
            {
                return a - b;
            }
            else if (op == "*")
            {
                return a * b;
            }
            else if (op == "/")
            {
                return a / b;
            }
            else
            {
                return 0;
            }
        }
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a: ");
            double a = Convert.ToDouble(Console.ReadLine());
            Console.WriteLine("Enter op: ");
            String op = Console.ReadLine();
```

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```
        Console.WriteLine("Enter b: ");  
        double b = Convert.ToDouble(Console.ReadLine());  
        Console.WriteLine("Result : {0}", calculator(a, op, b));  
        Console.ReadKey();  
    }  
}  
}
```

Task 3:

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
  
namespace ConsoleApplication1  
{  
    class Program    {  
        static void Main(string[] args)  
        {  
            Console.WriteLine("Enter start: ");  
            int start = Convert.ToInt32(Console.ReadLine());  
            Console.WriteLine("Enter end: ");  
            int end = Convert.ToInt32(Console.ReadLine());  
            Console.WriteLine("\nOdd Number");  
            while (start <= end)  
            {  
                if (start % 2 == 1)  
                {  
                    Console.WriteLine("Odd: {0}",start);  
                }  
                else{  
                    Console.WriteLine("Even: {0}",start);  
                }  
            }  
            Console.ReadKey();  
        }  
    }  
}
```

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Task 4:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter String: ");
            string str = Convert.ToString(Console.ReadLine());

            string reverse = "";

            for (int i = str.Length - 1; i >= 0; i--)
            {
                reverse += str[i];
            }
            Console.WriteLine("Original String: {0}", str);
            Console.WriteLine("Reverse String: {0}", reverse);

            Console.ReadKey();
        }
    }
}
```

Task 5:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
```

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```
namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter target: ");
            int target = Convert.ToInt32(Console.ReadLine());
            int[] arr = { 1, 3, 5, 6 };
            for (int i = 0; i < arr.Length; i++)
            {
                if (arr[i] == target)
                {
                    Console.WriteLine("Found");
                    break;
                }
                else{
                    Console.WriteLine("NotFound");
                }
            }
            Console.ReadKey();
        }
    }
}
```

Task 6:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApplication1
{
    class Class3
    {
        static void Main(string[] args)
        {
            int i, j, k;
```

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```
        for (i = 1; i <= 5; i++)  
        {  
            for (j = 1; j <= 5; j++)  
            {  
                if (j >= i)  
                {  
                    k = j - i + 1;  
                    Console.Write(k);  
                }  
                else  
                {  
                    k = i - j + 1;  
                    Console.Write(k);  
                }  
            }  
            Console.WriteLine();  
        }  
        Console.ReadLine();  
    }  
}
```