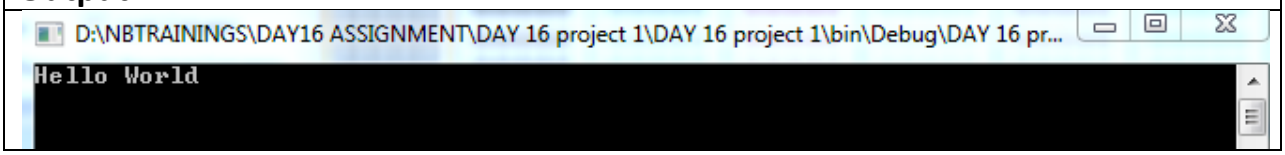
DAY 16 ASSIGNMENT
BY
MANOHAR ANDE
14TH FEB 2022

Q1.WACP to print Hello World

Code:

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

namespace DAY_16_project_1
{
   class Message
   {
      public  void PrintHello()
      {
         Console.WriteLine("Hello World");
      }
   }

   internal class Program
   {
      static void Main(string[] args)
      {
         Message obj = new Message();
         obj.PrintHello();

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

Output:



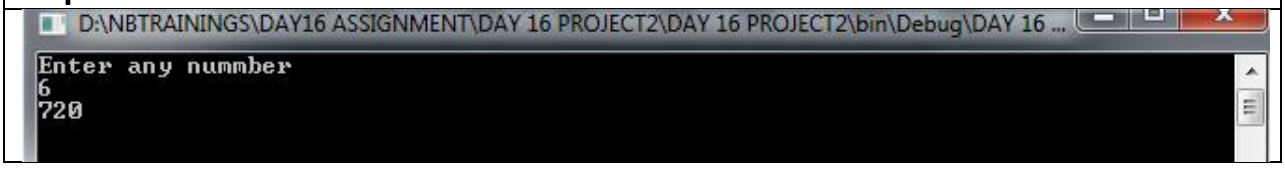
Q2.WACP to read number from user and print factorial of it.

Code:

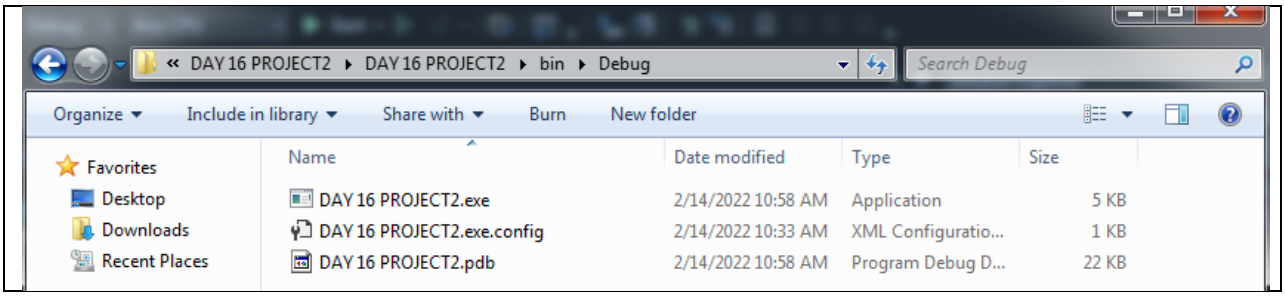
```
using System;
```

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

namespace DAY_16_PROJECT2
{
   class Factorial
   {


      public void Readinput()
      {
         int input;
         Console.WriteLine("Enter any nummber");
         input = Convert.ToInt32(Console.ReadLine());
         int fact = 1;
         for (int i = 1; i <= input; i++)
            fact = fact * i;
         Console.WriteLine(fact);

      }
   }

   internal class Program
   {
      static void Main(string[] args)
      {
         Factorial f = new Factorial();
         f.Readinput();

         Console.ReadLine();

      }
   }
}
```

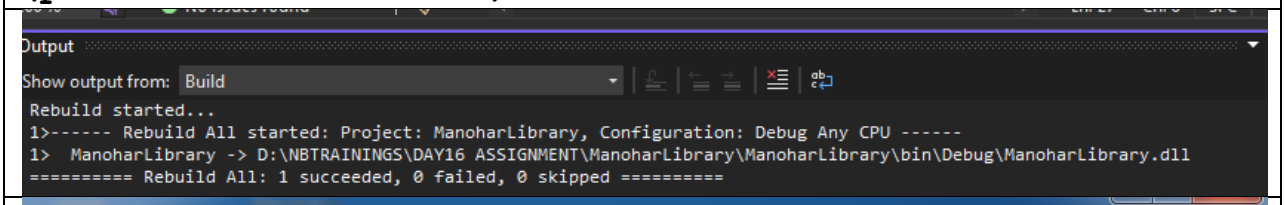
Ouput:

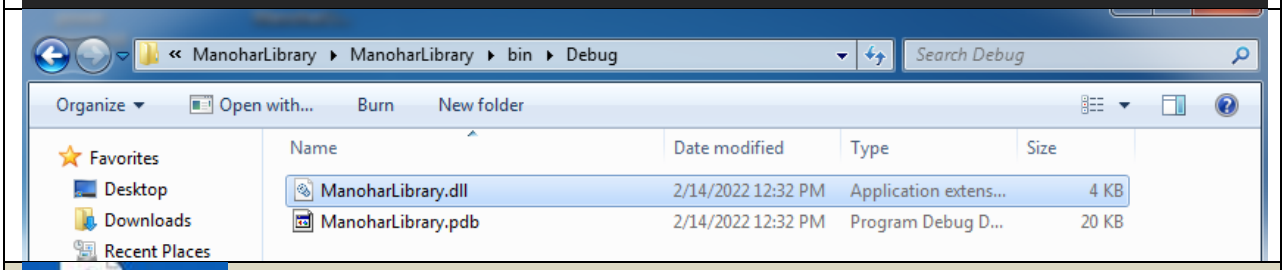


Q3.For the console application created in 2nd Task add screenshot of he .exe file location

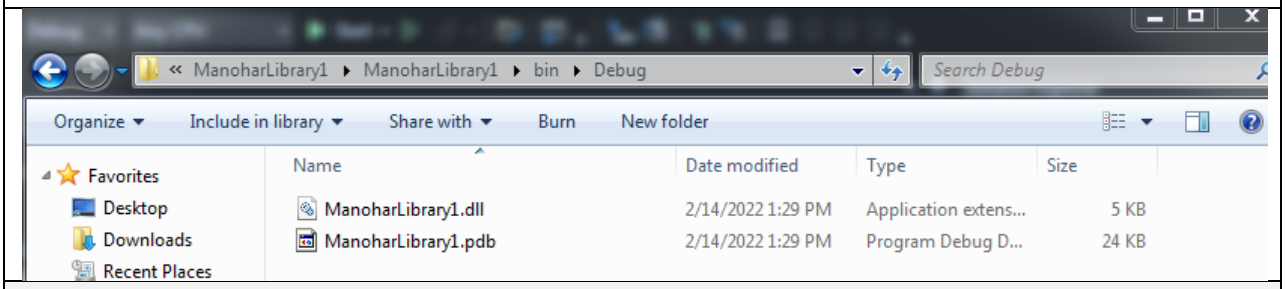


Q4.Create a class Library Project with name as <you name>Library
Create a class Mathematics as discussed in the class. [Add methods for reading number and finding factorial]
Re-build the project and you will get a .dll file (put screenshot of it)
Copy the .dll file to desktop (put screenshot of it)

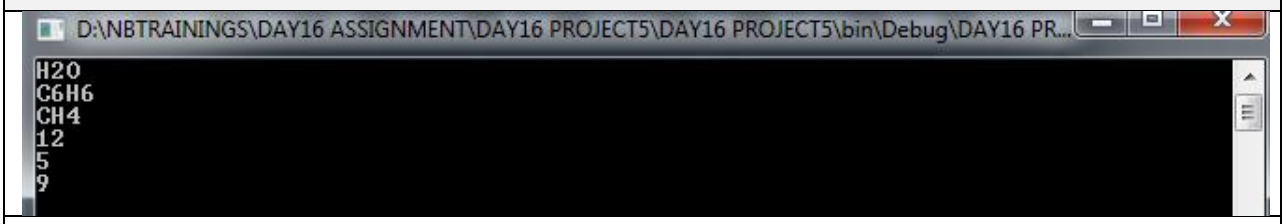




Q5. Create a class library with three classes in it:
a. Mathematics
b. Physics
c. Chemistry




```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using ManoharLibrary1;


namespace DAY16_PROJECT5
{
   internal class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine(Chemistry.GetWater());
         Console.WriteLine(Chemistry.GetBenzene());
         Console.WriteLine(Chemistry.GetMethene());
         Console.WriteLine(Mathematics.Add(5,7));
         Console.WriteLine(Physics.GetVelocity(3,2,3));

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



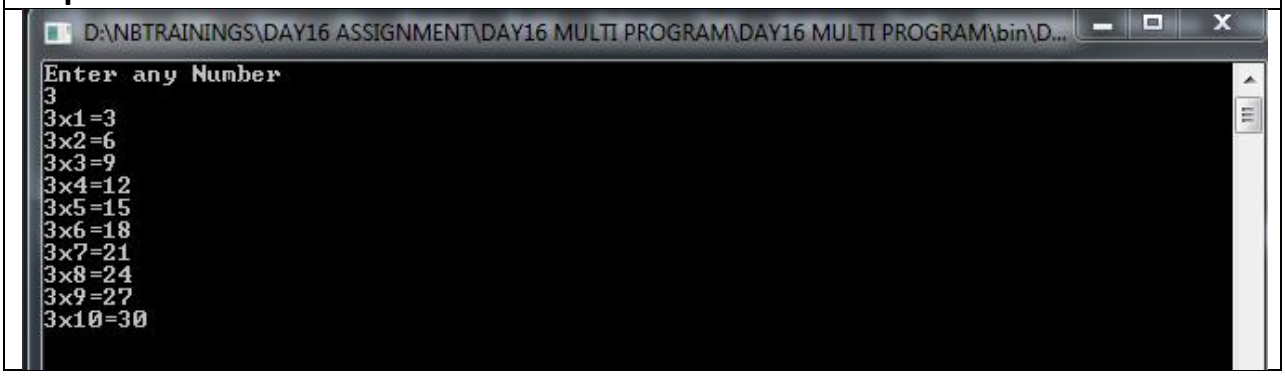
Q6.WACP to print multable table of a number

Code:

```
using System;
using System.Collections.Generic;
```

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

namespace Day16Project4MultiplicationTable
{
    internal class Multiplication
    {

        int input;

        public void ReadData()
        {
            Console.WriteLine("Enter any Number");
            input = Convert.ToInt32(Console.ReadLine());
        }

        public void GetMultiplication()
        {
            for (int i = 1; i <= +10; i++)
            {
                Console.WriteLine(input + "x" + i + "=" + input * i);
            }
        }

        static void Main(string[] args)
        {
            Multiplication m = new Multiplication();
            m.ReadData();
            m.GetMultiplication();
            Console.ReadLine();
        }
    }
}
```

Ouput:



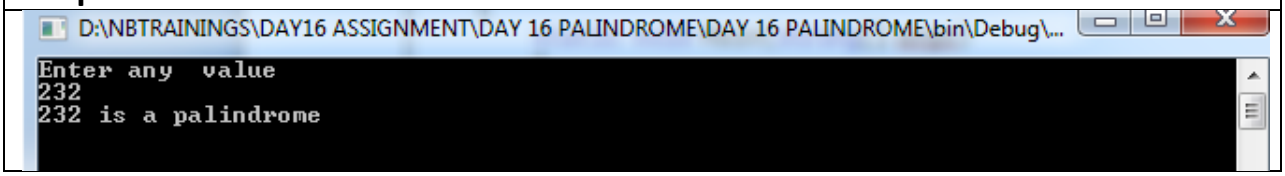
Q7. WACP to check if the given is number is Palindrome or not

Code:

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

namespace Day16Project5Pallindrome
{

    class Palindrome
    {
        int input;

        public void ReadData()
        {
            Console.WriteLine("Enter any  value");
            input = Convert.ToInt32(Console.ReadLine());
        }

        public void CheckPalindrom()
        {
            int sum = 0, rem = 0, temp = input;
            while (input > 0)
            {

                rem = input % 10;
                sum = sum * 10 + rem;
                input = input / 10;
            }
            if (temp == sum)
            {
                Console.WriteLine("{0} is a palindrome", temp);
            }
            else
                Console.WriteLine("{0} Given value is Not a Palindrome", temp);

        }

    }
    internal class Program
    {
        static void Main(string[] args)
        {
            Palindrome p = new Palindrome();
            p.ReadData();
            p.CheckPalindrom();
            Console.ReadLine();
        }
```

```
    }
}
```

Output:



Q8. Create a solution "MyProject" (as discussed in class)
Add three projects
a. YourNameLibrary (and add any class with methods)
b. PublicLibrary (add any class with methods)
c. ClientApp (and here refer above two libraries)

ManoharLibrary:

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

namespace ManoharLibrary
{
    public static class Mathematics
    {
        public static int Factorial(int n)
        {

            int fact = 1;
            for (int i = 1; i<n; i++)
                fact = fact * i;
            return fact;
        }
        public static int Add(int a, int b)
        {
            return a + b;
        }
        public static int Mul(int a , int b)
        {
            return a * b;
        }
    }
}
```

PublicLibrary:

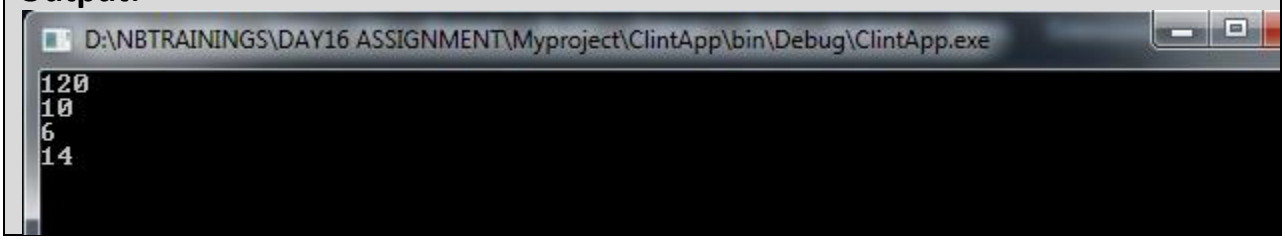
```
using System;
```

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


namespace PublicLibrary
{
    public static class Physics
    {
        public static int FinalVelocity(int u,int a, int t)
        {
            return u + a * t;
        }
    }
}
```

Consoleapp:

```
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using ManoharLibrary;
using PublicLibrary;

namespace ClintApp
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine(Mathematics.Factorial(6));
            Console.WriteLine(Mathematics.Add(5, 5));
            Console.WriteLine(Mathematics.Mul(2, 3));
            Console.WriteLine(Physics.FinalVelocity(2,3,4));

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

Output:

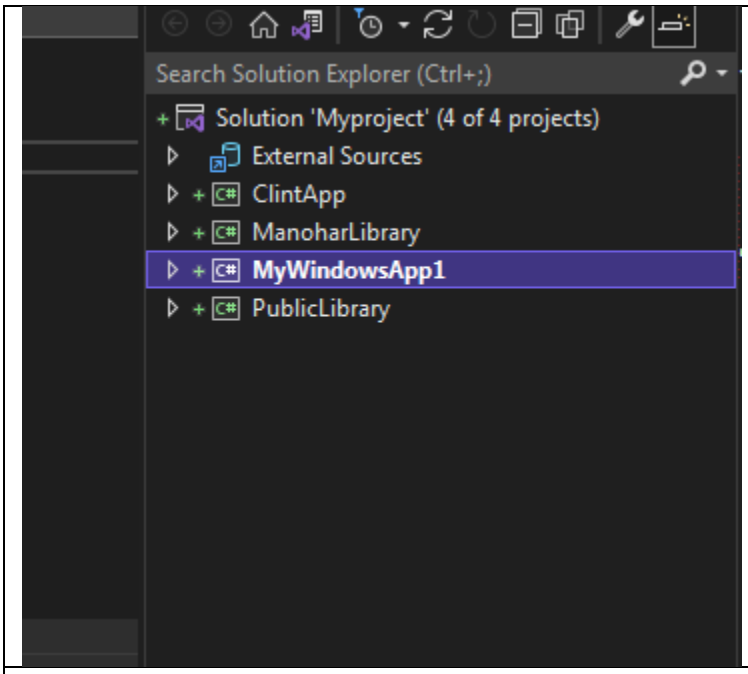


Q9.Add one more project (windows application)

Add some 3 or 4 screen shots just to prove that you have done this.

Code for windows application:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using ManoharLibrary;

namespace MyWindowsApp1
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         int input = Convert.ToInt32(textBox1.Text);
         int factorial = Mathematics.Factorial(input);
         textBox2.Text = factorial.ToString();

      }
   }
}
```


Search Solution Explorer (Ctrl+;)
Solution 'Myproject' (4 of 4 projects)
External Sources
ClintApp
ManoharLibrary
MyWindowsApp1
PublicLibrary