Day 16 Assignment 14 Feb 2022

By K. SANJAY

|  |
| --- |
| 1. WACP to print Hello World  Hint: Think object oriented |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day\_16\_Project\_1  {  public class Wishes  {  public static void PrintHello()  {  Console.WriteLine("Hello Every One");  }  }  internal class Program  {  static void Main(string[] args)  {  Wishes.PrintHello();  Console.ReadLine();  }  }  } |
| Output |
|  |

|  |
| --- |
| 2. WACP to read a number from user and print factorial of it.  Hink : Think object oriented |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Day\_16\_Project\_2  {  public class Mathematics  {  int input;  public void ReadData()  {  Console.WriteLine("Enter Number");  input = Convert.ToInt32(Console.ReadLine());  }  public int GetFactorial()  {  int fact = 1;  for (int i = 1; i <=input; i++)  {  fact = fact \* i;  }  return fact;  }  }  internal class Program  {  static void Main(string[] args)  {  Mathematics m = new Mathematics();  m.ReadData();  Console.WriteLine(m.GetFactorial());  Console.ReadLine();  }  }  } |
| Output |
|  |

|  |
| --- |
| 3. For the console application created in 2nd task,  add screen shot of the .exe file location |
| Screen Shot |
|  |

|  |
| --- |
| 4. Create a Class Library Project with name as  <YourName>Library ( Example : MeganadhLibrary )  Create a class Mathematics as discussed in the class.  [ Add methods for reading number and finding factorial ]  Re-Build the project and you will a .dll file.  ( Put the screen shot of this )  Copy the dll file to your desktop  (put the screen shot of this ) |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace SanjayLibrary  {  internal class Mathematics  {  int input;  public void ReadData()  {  Console.WriteLine("Enter Number");  input = Convert.ToInt32(Console.ReadLine());  }  public int GetFactorial()  {  int fact = 1;  for (int i = 1; i <= input; i++)  {  fact = fact \* i;  }  return fact;  }  }  } |
| Screen Shot |
|  |
|  |

|  |
| --- |
| 5. Create a class library with three classes in it:  a. Mathematics  b. Physics  c. Chemistry  and add methods as discussed in the class  refer all the three classes in a console application. |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using JohnLibrary;  using System.Threading.Tasks;  namespace Day\_16\_Project\_4  {  internal class Program  {  static void Main(string[] args)  {  Mathematics m = new Mathematics();  m.ReadData();  Console.WriteLine(m.Factorial());  Physics p = new Physics();  Console.WriteLine(p.FinalVelocity(8,5,2));  Chemistry ch = new Chemistry();  Console.WriteLine(ch.Benzene());  Console.WriteLine(ch.Water());  Console.WriteLine(ch.Methane());    Console.ReadLine();  }  }  } |
| Scren Shot |
|  |
|  |

|  |
| --- |
| 6. 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 Day\_16\_Project\_5  {  class Multiplication  {  int input;  public void ReadData()  {  Console.WriteLine("Enter Number");  input = Convert.ToInt32(Console.ReadLine());  }  public void PrintData()  {  for (int i = 1; i <= 10;i++)  {  Console.WriteLine($"{input}\*{i}={i\*input}");  }  }  }  internal class Program  {  static void Main(string[] args)  {  Multiplication mt = new Multiplication();  mt.ReadData();  mt.PrintData();  Console.ReadLine();  }  }  } |
| Output |
|  |

|  |
| --- |
| 7. 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 Day\_16\_Project\_5  {  class Palindrome  {  int n, r, sum = 0, temp;  public void ReadData()  {  Console.WriteLine("Enter Number");  n = Convert.ToInt32(Console.ReadLine());  }  public void palindrome()  {  temp = n;  while(n>0)  {  r = n % 10;  sum = (sum \* 10) + r;  n = n / 10;  }  if(temp==sum)  Console.WriteLine("Palindrome Number");  else  Console.WriteLine("Not a Palindrome Number");  }  }  internal class Program  {  static void Main(string[] args)  {  Palindrome pdr = new Palindrome();  pdr.ReadData();  pdr.palindrome();  Console.ReadLine();  }  }  } |
| Output |
|  |

|  |
| --- |
| 8. 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) |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using Sanjaylibrary;  using Publiclibrary;  namespace Clientapp  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine(Mathmatics.Factorial(4));  Console.WriteLine(Physics.FinalVelocity(2,3,4));  Console.ReadLine();  }  }  } |
| Screen Shot |
|  |

|  |
| --- |
| 9. Add one more project (windows application)  Add some 3 or 4 screen shots just to prove that  you have done this. |
| Code |
| 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 Sanjaylibrary;  namespace WindowsApp  {  public partial class Form1 : Form  {  public Form1()  {  InitializeComponent();  }  private void button1\_Click(object sender, EventArgs e)  {  int input = Convert.ToInt32(textBox1.Text);  int Factorial = Mathmatics.Factorial(input);  textBox2.Text = Factorial.ToString();  }  }  } |
| Screen Shot |
|  |
|  |

|  |
| --- |
| 10. Research and write what is the use of partial classes  in C#  WRITE EXAMPLE CODE AND PUT SCREEN SHOTS |
| Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Sanjaylibrary  {  public static partial 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;  }    }  } |
| 2nd Code |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Sanjaylibrary  {  public static partial class Mathematics  {  public static int Divide(int a , int b)  {  return a / b;  }  }  } |
|  |