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| Day 9 Assignment by M.Pallavi  03-02-2022 |

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| Program 1: Write a C# program to read input from user and print a. factorial of a number |
| Code:  using System;  namespace program\_1  {  class Mathtask  {  private int input;  public void ReadInput()  {  Console.WriteLine("enter number");  input = Convert.ToInt32(Console.ReadLine());  }    public void PrintFactors()  {  for (int i = 1; i <= input; i++)  {  if (input % i == 0)  {  Console.WriteLine(i);  }  }  }  public bool IsPrime()  {  int count = 0;  for (int i = 1; i < input; i++)  {  if (input % i == 0)  count++;  }  if (count == 2)  {  return false;  }  else  {  return true;  }  }  public void Facto()  {  Console.WriteLine("enter factorial number");  int n;  n = Convert.ToInt32(Console.ReadLine());  int fact = 1;  for (int i = 1; i <= n; i++)  {  fact = fact \* i;  }  Console.WriteLine(fact);  }  }  internal class Program  {  static void Main(string[] args)  {  Mathtask obj = new Mathtask();  obj.ReadInput();    obj.PrintFactors();  if (obj.IsPrime() == true)  {  Console.WriteLine("input is prime");  }  else  Console.WriteLine("input is not prime");  obj.Facto();  }  }  } |
| Output: |

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| 2. Write C# program to read two numbers from use and print  a. sum of two numbers  b. difference of two numbers  c. product of two numbers  d. division of two numbers |
| Code:  using System;  namespace program2  {  public class numbers  {  private int a;  private int b;  public void ReadInput()  {  Console.WriteLine("enter a value");  a = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("enter b valu");  b = Convert.ToInt32(Console.ReadLine());  }  public int Addnum()  {  return a + b;  }  public int Subnum()  {  return a - b;  }  public int Mulnum()  {  return a \* b;  }  public int Div()  {  return a /b;  }  }  internal class Program  {  static void Main(string[] args)  {  numbers obj = new numbers();  obj.ReadInput();  Console.WriteLine("sum of 2 numbers");  Console.WriteLine(obj.Addnum());  Console.WriteLine("subtraction of 2 numbers");  Console.WriteLine(obj.Subnum());  Console.WriteLine("muultiplication of 2 numbers");  Console.WriteLine(obj.Mulnum());  Console.WriteLine("division of 2 numbers");  Console.WriteLine(obj.Div());  }  }  } |
| Output: |

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| Program: 3. Create an employee class with below variables id, name, salary, company write methods to read data and print data. |
| code:  using System;  namespace program3  {  public class Employee  {  private int id;  private string name;  private int salary;  private string companyname;  public void ReadInput()  {  Console.WriteLine("enter id ");  id = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("enter NAME ");  name = Console.ReadLine();  Console.WriteLine("enter salary ");  salary = Convert.ToInt32(Console.ReadLine());  }  public void PrintEmployee()  {  Console.WriteLine($"id={id},name={name},salary={salary}");  }  internal class Program  {  static void Main(string[] args)  {  Employee emp1 = new Employee();  Employee emp2 = new Employee();  emp1.ReadInput();  emp1.PrintEmployee();  emp2.ReadInput();  emp2.PrintEmployee();  }  }  }  } |
| Ouput: |

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| 4. Research and find the difference between normal variable and static variable. |
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