|  |
| --- |
| C# Programs for Assignment  done By Anusha Bellala |

|  |
| --- |
| 1.Print Multiplication Table for a given number. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace MultiplicationTableConsole  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int input, i;  //read the data from user  Console.WriteLine("{Enter the Number:");  input = Convert.ToInt32(Console.ReadLine());  //logic  for (i = 1; i <= 10; i++)  {  Console.WriteLine(input + "x" + i +"=" + input\*i);  }  //print output  Console.ReadLine(); |
| Output: |

|  |
| --- |
| 2.Print Factorial of given number. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace FactorialNumberConsole  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int input, i, product = 1;  //read data from the user  Console.WriteLine("Enter the Number:");  input = Convert.ToInt32(Console.ReadLine());  //logic  for(i=1;i<=input;i++)  {  product = product \* i;  }  //print output  Console.WriteLine(product);  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| 3.Print Sum of n natural numbers. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace NaturalNumbers  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int input, sum = 0,i;  //read the data from user  Console.WriteLine("{Enter the Number:");  input = Convert.ToInt32(Console.ReadLine());  //logic  for(i=1;i<=input;i++)  {  sum = sum + i;    }  //print output  Console.WriteLine("sum="+sum);  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| 4.Print Factorial using Functions. |
| int Factorial(int input);  static void Main(string[] args)  {  //variable declaration  int fn, sn;  //read the data from user  Console.WriteLine("enter first number:");  fn = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("enter second number:");  sn = Convert.ToInt32(Console.ReadLine());  //print the output  Console.WriteLine("Factorial of {0} is {1}", fn, Factorial(fn));  Console.WriteLine("Factorial of {0} is {1}", sn, Factorial(sn));  Console.ReadLine();  int Factorial(int input)  {  int fact = 1;  for (int i = 0; i < input; i++)  {  fact = fact \* i;  return fact;  }  } |
| Output: |

|  |
| --- |
| 5.Print Factorial using Recursion. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace FactorialUsingRecursion  {  internal class Program  {  //read a number and print factorial[using recursion]  int Factorial(int input);  static void Main(string[] args)  {    //variable declaration  int fn, sn;  //read the data from user  Console.WriteLine("enter first number:");  fn = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("enter second number:");  sn = Convert.ToInt32(Console.ReadLine());  //print the output  Console.WriteLine("Factorial of {0} is {1}", fn, Factorial(fn));  Console.WriteLine("Factorial of {0} is {1}", sn, Factorial(sn));  Console.ReadLine();  int Factorial(int input)  {  int fact = 1;  for (int i = 0; i < input; i++)  {  if (input == 0)  return 1;  else  return input \* Factorial(input - 1);  }  }  }  }  } |
| Output: |

|  |
| --- |
| 6.Print Factors of a given number. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Factorsconsole  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int input, i;  //read the data from user  Console.WriteLine("Enter the Number:");  input = Convert.ToInt32(Console.ReadLine());  //logic  for(i=1;i<=input;i++)  {  if (input % i == 0)  Console.WriteLine(i);  }  //print output  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| Print Power of a given number. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace powernumConsole  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int pow = 1,fn,sn;  //read the data from user  Console.WriteLine("Enter first number:");  fn = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter second number:");  sn = Convert.ToInt32(Console.ReadLine());  //logic  for (int i=1;i<=sn;i++)  {  pow = pow \* fn;  }  //print output  Console.WriteLine("p="+pow);  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
|  |
|  |
|  |