|  |
| --- |
| 20 C Programs converted to C# Programs    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. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace FactorialusingFunctions  {  internal class Program  {  //purpose to read a number and print its factorial    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());  int fact = Factorial(fn);  int fact1 = Factorial(sn);  //print the output  Console.WriteLine("Factorial of {0} is {1}", fn, fact);  Console.WriteLine("Factorial of {0} is {1}", sn, fact1);  Console.ReadLine();      }  private static int Factorial(int input)  {  int fact3 = 1;  for (int i = 0; i < input; i++)  {  fact3 = fact3 \* i;  return fact3;  }  }  }  } |
| Output: |

|  |
| --- |
| 5.Print Factorial using Recursion. |
| using System;  using System.Cusing System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Factorollections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace FactorialUsingRecursion  {  internal class Program  {  //read a number and print factorial[using recursion]  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());  int fact = Factorial(fn);  int fact1 = Factorial(sn);  //print the output  Console.WriteLine("Factorial of {0} is {1}", fn,fact);  Console.WriteLine("Factorial of {0} is {1}", sn, fact1);  Console.ReadLine();  }  private static int Factorial(int input)  {    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: |

|  |
| --- |
| 7.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: |

|  |
| --- |
| 8.Program to check if a number is Prime or not. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace PrimeNumberConsole  {t.  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int i, input, count = 0;  //read the data from user  Console.WriteLine("Enter any number:");  input=Convert.ToInt32(Console.ReadLine());  //logic  for (i = 1; i <= input; i++)  {  if (input % i == 0)  count++;  }  //print output  if(count==2)  Console.WriteLine("{0} is Prime Number",input);  else  Console.WriteLine("{0} is Not a Prime Number",input);  Console.ReadLine();  }    }  } |
| Output: |

|  |
| --- |
| 9.Print number is prime or not by using funtions. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace PrimeNumberUsingFunction  {    internal class Program  {  public static bool isPrimenumber(int input)  {  int i;  for (i = 2; i < input; i++)  if (input % i == 0)  break;  if (i == input)  return true;  else  return false;  }  static void Main(string[] args)  {  //read the data from user  Console.WriteLine("Enter any number:");  int n = Convert.ToInt32(Console.ReadLine());    //print output  if (isPrimenumber(n))  Console.WriteLine("{0} is Prime Number", n);  else  Console.WriteLine("{0} is Not a Prime Number",n);  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| 10.Print the prime number between the range. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace PrimeNumberRange  {  internal class Program  {  static void Main(string[] args)  {  int i, str, end, ctr, num;  //read the data from user  Console.WriteLine("Enter starting number:");  str = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter ending number:");  end = Convert.ToInt32(Console.ReadLine());  Console.Write("The prime numbers between {0} and {1} are : \n", str, end);  //logic  for (num = str; num <= end; num++)  {  ctr = 0;  for (i = 2; i <= num / 2; i++)  {  if (num % i == 0)  {  ctr++;  break;  }  }  if (ctr == 0 && num != 1)  Console.Write("{0} ", num);  }  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| 11.Print Fibonacci series |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Fibonaaci  {  internal class Program  {  static void Main(string[] args)  {  //variable declaration  int n, i, a = 0, b = 1,c;    //read the data from user  Console.WriteLine("Enter no. of terms to be printed(n>2):");  n=Convert.ToInt32(Console.ReadLine());    //logic  Console.WriteLine("Fibonacci series: 0 1");  for(i=1;i<=n-2;i++)  {  c = a + b;    a = b;  b = c;  Console.WriteLine("c="+c);  }  Console.ReadLine();  }  }  } |
| Output: |

|  |
| --- |
| 12.Print Armstrong number. |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Armstrong  {  internal class Program  {  static void Main(string[] args)  {  int n, rem, m, result = 0;  Console.WriteLine("Enter any number:");  n=Convert.ToInt32 (Console.ReadLine());  m = n;  while(m>0)  {  rem = m % 10;  m = m / 10;  result = result + rem \* rem \* rem;  }  if(result==n)  Console.WriteLine("{0} is Armstrong number",n);  else  Console.WriteLine("{0} is not a armstrong number",n);  Console.ReadLine();  }    }  } |
| Output: |

|  |
| --- |
| 13. |
|  |
|  |