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| **20 C# Programs**  **By**  **VARUN SAI KUMAR CHEGONI**  **27-Jan-2022**  **NB Training** |

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| Program1: |
| Write a C# Program to Print Multiplication of a Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace CProgram1  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("program to Print Multiplication of a Number by Varun");  Console.WriteLine();  // Variable Declaration  int input, i;  // User Input  Console.WriteLine("enter number");  input = Convert.ToInt32(Console.ReadLine());  for (i = 1; i <= 10; i++) // Logic  {  Console.WriteLine(input + "x" + i + "x" + input \* i); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 2: |
| Write a C# Program to Print Factorial of a Given Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program2  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write a C# Program to Print Factorial of a Given Number");  Console.WriteLine();  int input, product = 1, i; // Variable Declaration  // User Input  Console.WriteLine("Enter any number");  input = Convert.ToInt32(Console.ReadLine());  for (i = 1; i <= input; i++)  {  product = product \* i; // Logic  }  // Print Output  Console.WriteLine(product);  Console.ReadLine();  }  }  } |
| Output: |
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| Program 3: |
| Write a C# Program to Print Sum N Natural Numbers |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Project3  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write a C# Program to Print Sum N Natural Numbers by Varun");  Console.WriteLine();  int input, sum = 0, i; // Variable Declaration  // User input  Console.WriteLine("enter any number");  input = Convert.ToInt32(Console.ReadLine());  for (i = 1; i <= input; i++)  {  sum = sum + i; // Logic  }  Console.WriteLine(sum); // Print Output  Console.ReadLine();  }  }  } |
| Output: |
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| Program 4: |
| Write C# Program to Print Factorial using Function |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program4  {  internal class Program  {  public static int Factorial(int n)  {  int fact = 1;  for (int i = 1; i < n; i++)  fact \*= i;  return fact;  }  public static void print(int n)  {  Console.WriteLine("Facorial of {0} = {1}", n, Factorial(n));  }  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Factorial using Function by Varun");  Console.WriteLine();  int n = 4, n1 = 5, n2 = 7;  print(n);  print(n1);  print(n2);  Console.ReadLine();  }  }  } |
| Output: |
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| Program 5: |
| Write C# Program to Print Factorial using Recursion |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program5  {  internal class Program  {  public static int Factorial(int n)  {  int fact = 1;  for (int i = 1; i < n; i++)  fact \*= i;  return fact;  }  public static void print(int n)  {  Console.WriteLine("Facorial of {0} = {1}", n, Factorial(n));  }  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Factorial using Recursion by Varun");  Console.WriteLine();  int n = 4, n1 = 5, n2 = 7;  print(n);  print(n1);  print(n2);  Console.ReadLine();  }  }  } |
| Output: |
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| Program 6: |
| Write a C# Program to Print Factors of a Given Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program6  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write a C# Program to Print Factors of a Given Number by Varun");  Console.WriteLine();  int input, i; // Variable Declaration  Console.WriteLine("Enter any number"); // User Input  input = Convert.ToInt32(Console.ReadLine());  for (i = 1; i <= input; i++)  {  if (input % i == 0) // Logic  Console.WriteLine(i); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 7: |
| Write C# Program to Print Power of a Given Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program7  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Power of a Given Number by Varun");  Console.WriteLine();  // Variable Declaration  int b, ex;  int p = 1;  // User input  Console.WriteLine("Enter first number:");  b = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter second number:");  ex = Convert.ToInt32(Console.ReadLine());  for (int i = 1; i <= ex; i++)  p = p \* b; // Logic  Console.WriteLine("power =" + p); // output  Console.ReadLine();  }  }  } |
| Output: |
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| Program 8: |
| Write C# Program on Given Number is Prime Number or Not |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program8  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Given Number is Prime Number or Not by Varun");  Console.WriteLine();  // Variable Declaration  int input, i, count = 0;  //input  Console.WriteLine("Enter Input");  input = Convert.ToInt32(Console.ReadLine());  for (i =2; i<=input; i++)  {  if (input % i == 0)  break;  }  if (i == input)  Console.WriteLine("The given input {0} is Prime", input);  else  Console.WriteLine("The given input {0} is not a prime", input);  Console.ReadLine();  }  }  } |
| Output: |
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| Program 9: |
| Write C# Program on Prime Number using Function |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program9  {  internal class Program  {  public static void Prime(int input)  {  int i;  for (i = 2; i< input; i++)  {  if (input % i == 0)  break;  }  if (i == input)  Console.WriteLine("The given Input {0} is prime", input);  else  Console.WriteLine("The given Input {0} is no a prime", input);  }  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Given Number is Prime Number or Not using Function by Varun");  Console.WriteLine();  {  Console.WriteLine("enter input");// User Input  Prime(Convert.ToInt32(Console.ReadLine()));  Console.ReadLine();  }  }  }  } |
| Output: |
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| Program 10: |
| Write C# Program of Prime Number in Range |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program10  {  internal class Program  {  public static bool Prime(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)  {  Console.WriteLine("Write C# Program to Print Prime Number in Range by Varun");  Console.WriteLine();  int i, a, b; // Variable Declaration  Console.WriteLine("Enter Starting Number: "); // User Input  a = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Enter Last Numbar : "); // User Input  b = Convert.ToInt32(Console.ReadLine());  for (i = a; i <= b; i++)  {  if (Prime(i)) // Logic  Console.WriteLine(i); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 11: |
| Write C# Program of Fibonacci Series |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program11  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Fibonacci Series by Varun");  Console.WriteLine();  // Variable Declaration  int input;  int next = 0;  int prev = 0;  Console.WriteLine("enter input");  input = Convert.ToInt32((Console.ReadLine())); // User Input  for (int i = 0; i<= input; i++)  {  if (next == 0)  {  next = 1;  }  else  {  int temp = next;  next = next + prev;  prev = temp; // Logic  }  Console.WriteLine(next); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 12: |
| Write C# Program of Armstrong Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program12  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Armstrong Number by Varun");  Console.WriteLine();  int number, rem, sum = 0, temp; // Variable Declaration  Console.WriteLine("Enter Number"); //User input  number = Convert.ToInt32(Console.ReadLine());  temp = number;  while (number > 0)  {  rem = number % 10;  sum = sum + (rem\*rem\*rem);  number = number / 10; // Logic  }  if (temp == sum)  {  Console.WriteLine("{0} is Armstrong", temp); // Output  }  else  {  Console.WriteLine("{0} is not Armsrong", temp); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 13: |
| Write C# Program of Armstrong Number using Function |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program13  {  internal class Program  {  public static bool Arm(int n)  {  int temp, sum = 0, rem;  temp = n;  while (n>0)  {  rem = n % 10;  sum = sum + (rem \* rem \* rem);  n = n / 10;  }  if (temp == sum)  {  return true;  }  else  {  return false;  }  }  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Armstrong Number using Function by Varun");  Console.WriteLine();  int n;  Console.WriteLine("enter number:");  n = Convert.ToInt32(Console.ReadLine());  if (Arm(n) == true)  Console.WriteLine("{o} is Armstrong number", n);  else  Console.WriteLine("{0} is not Armstrong number", n);  Console.ReadLine();  }  }  } |
| output: |
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| Program 14: |
| Write C# Program for Armstrong Number in Range |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program14  {  internal class Program  {  public static bool Arm(int number)  {  int temp, sum = 0, rem;  temp = number;  while (number > 0)  {  rem = number % 10;  sum = sum + (rem \* rem \* rem);  number = number / 10;  }  if (temp == sum)  {  return true;  }  else  {  return false;  }  }  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Armstrong Number in Range by Varun");  Console.WriteLine();  int a, b; // Variable Declaration  Console.WriteLine("enter Initial Value:"); // User Input  a = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("enter Last Value:"); // User Input  b = Convert.ToInt32(Console.ReadLine());  for (int i = a; i <= b; i++)  {  if (Arm(i))  Console.WriteLine(i); // Output  }  Console.ReadLine();  }  }  } |
| Output: |
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| Program 15: |
| Write C# Program for Sum of a Digits of Given Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program15  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Sum of Digit by Varun");  Console.WriteLine();  int rem, sum = 0, n; // Variable Declaration  Console.WriteLine("enter number:"); // User Input  n = Convert.ToInt32(Console.ReadLine());  int temp = n;  while (n > 0)  {  rem = n % 10;  sum = sum + rem;  n = n / 10; // Logic  }  Console.WriteLine("Sum of given {0} is {1}", temp, sum); // Print Output  Console.ReadLine();  }  }  } |
| Output: |
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| Program 16: |
| Write C# Program for Reverse a Given Number |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program16  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Reverse of a Given by Varun");  Console.WriteLine();  int n, temp, rem, rev = 0; // Variable Declaration  Console.WriteLine("Enter Number"); // User Input  n = Convert.ToInt32(Console.ReadLine());  temp = n;  while (n>0)  {  rem = n % 10;  rev = (rev \* 10) + rem;  n = n / 10; // Logic  }  Console.WriteLine("The reverse of {0} is {1}", temp, rev); // Print Output  Console.ReadLine();  }  }  } |
| Output: |
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| Program 17: |
| Write C# Program to Find the Given Number is Palindrome or Not |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program17  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Read a Number and Check if it is Palindrome or Not by Varun");  Console.WriteLine();  int input, m, rem, rev = 0; // Variable Declaration  Console.WriteLine("Enter any Number : ");  input = Convert.ToInt32(Console.ReadLine());  // Logic  m = input;  while (m > 0)  {  rem = m % 10;  m = m/10;  rev = rev \* 10 + rem;  }  if (input == rev)  Console.WriteLine("{0} is a Palindrome", input);  else  Console.WriteLine("{0} is not a Palindrome", input);  Console.ReadLine();  }  }  } |
| Output: |
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| Program 18: |
| Write C# Program to Swap Numbers Using Third Variable. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program18  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Swap Numbers Using Third Variable by Varun");  Console.WriteLine();  int a = 6, b = 9,t;// Variable Declaration  Console.WriteLine("Before Swaping :");  Console.WriteLine("a = {0}, b = {1}", a, b);  t= a;  a= b;  b= t; // Logic  Console.WriteLine("After Swaping :");  Console.WriteLine("a = {0}, b = {1}", a, b); // Output  Console.ReadLine();  }  }  } |
| Output: |
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| Program 19: |
| Write C# Program to Swap Numbers Without Using Third Variable. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program19  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Swap Numbers Without Using Third Variable by Varun");  Console.WriteLine();  int a = 4, b = 8;// Variable Declaration  Console.WriteLine("Before Swaping :");  Console.WriteLine("a = {0}, b = {1}", a, b);  a= a + b;  b= a - b;  a= a - b; // Logic  Console.WriteLine("After Swaping :");  Console.WriteLine("a = {0}, b = {1}", a, b); // Output  Console.ReadLine();  }  }  } |
| Output: |
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| Program20: |
| Write C# Program to Print Stars in Given Format. |
| Code: |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace Program20  {  internal class Program  {  static void Main(string[] args)  {  Console.WriteLine("Write C# Program to Print Stars in Given Format by Varun");  Console.WriteLine();  int r, i, j; // Variable Declaration  Console.WriteLine("Enter the Number of Rows to Print Star :"); // User Input  r = Convert.ToInt32(Console.ReadLine());  //Logic  for (i = 0; i <= r; i++)  {  for (j = 1, j <= i, j++)  {  Console.WriteLine("\*");  }  }  Console.ReadLine();  }  }  } |
| Output: |
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