**Q26. Finding Prime Factors of a number**

**using** System;

**namespace** prime

{

**public** **class** Program26

    {

**public** **static** **void** Main()

        {

            Console.WriteLine("Enter number: ");

**int** userInput = Convert.ToInt32(Console.ReadLine());

            PrimeFactors(userInput);

            Console.Read();

        }

**public** **static** **void** PrimeFactors(**int** n)

        {

**while** (n % 2 == 0)

            {

                Console.Write(2 + " ");

                n /= 2;

            }

**for** (**int** i = 3; i &lt;= Math.Sqrt(n); i += 2) { **while** (n % i == 0) { Console.Write(i + " "); n /= i; } } **if** (n &gt; 2)

                Console.Write(n);

        }

    }

}

**Q27. Find Prime number within a given range or between two numbers.**

using System;

using System.Linq;

public class Program27

{

public static void Main(string[] args)

{

int st, en, cnt = 0;

Console.WriteLine("Initial Value:-");

initialValue = int.Parse(Console.ReadLine());

Console.WriteLine("Ending Value:-");

endValue = int.Parse(Console.ReadLine());

for (int i = 1; i < en; i++)

{

for (int j = 1; j < en; j++)

{

if (i % j == 0)

{

cnt++;

}

}

if (cnt == 2)

{

Console.WriteLine(i);

}

cnt = 0;

}

}

}

**Q28. Find Strong number**

using System;

public class Program28

{

static int getFactorial(int number){

int factorial = 1;

for(int i = number; i > 1; i--){

factorial = factorial \* i;

}

return factorial;

}

public static void Main()

{

int givenNumber;

Console.WriteLine("Enter a number to check");

givenNumber = Convert.ToInt32(Console.ReadLine());

int sum = 0;

int copyNumber = givenNumber;

while(copyNumber != 0){

int lastDigit = copyNumber%10;

sum = sum + getFactorial(lastDigit);

copyNumber = copyNumber / 10;

}

if(sum == givenNumber){

Console.WriteLine("Given number is a strong number");

}else{

Console.WriteLine("Given number is not a strong number");

}

}

}

**Q29. Find Perfect number**

**using** System;

**using** System.Collections.Generic;

**using** System.Linq;

**using** System.Text;

**class** Program29

{

**static** **void** Main(**string**[] args)

{

**int** number,sum=0,n;

Console.Write("enter the Number");

number = **int**.Parse(Console.ReadLine());

n = number;

**for** (**int** i = 1; i < number;i++)

{

**if** (number % i == 0)

{

sum=sum + i;

}

}

**if** (sum == n)

{

Console.WriteLine("**\n** Entered number is a perfect number");

Console.ReadLine();

}

**else**

{

Console.WriteLine("**\n** Entered number is not a perfect number");

Console.ReadLine();

}

}

}

}

**Q30. Check Armstrong number.**

using System;

public class Program30

{

public static void Main(string[] args)

{

int n,r,sum=0,temp;

Console.Write("Enter the Number= ");

n= int.Parse(Console.ReadLine());

temp=n;

while(n>0)

{

r=n%10;

sum=sum+(r\*r\*r);

n=n/10;

}

if(temp==sum)

Console.Write("Armstrong Number.");

else

Console.Write("Not Armstrong Number.");

}

}