1. Check if a Number is Palindrome:

```
using System;
 class Program
{
   static void Main()
   {
      Console.Write("Enter a positive number: ");
      int n = int.Parse(Console.ReadLine());
      int temp = n;
      int r, rev = 0;

      while (temp > 0)
      {
         r = temp % 10;
         rev = (rev * 10) + r;
         temp = temp / 10;
      }

      if (n == rev)
      {
         Console.WriteLine("The number is a palindrome.");
      }
      else
      {
         Console.WriteLine("The number is not a palindrome.");
      }
   }
}
```

2. Reverse a Number:

```
using System;
class Program
{
   static void Main()
   {
      Console.Write("Enter a positive number: ");
      int n = int.Parse(Console.ReadLine());
      int temp = n;
      int r, rev = 0;

      while (temp > 0)
      {
         r = temp % 10;
         rev = (rev * 10) + r;
         temp = temp / 10;
```

```
        }
        Console.WriteLine("The reverse of the number is: " + rev);
    }
}
```

3. Print Each Digit on a Separate Line:

```
using System;
class Program
{
    static void Main()
    {
        Console.Write("Enter a positive number: ");
        int n = int.Parse(Console.ReadLine());

        Console.WriteLine("The digits of the number are:");
        while (n > 0)
        {
            int digit = n % 10;
            Console.WriteLine(digit);
            n = n / 10;
        }
    }
}
```

4. Find the Sum of Cube of Digits:

```
using System;
class Program
{
    static void Main()
    {
        Console.Write("Enter a positive number: ");
        int n = int.Parse(Console.ReadLine());
        int temp = n;
        int r, sum = 0;

        while (temp > 0)
        {
            r = temp % 10;
            sum = sum + (r * r * r);
            temp = temp / 10;
        }

        Console.WriteLine("The sum of the cube of digits: " + sum);
    }
}
```

5. Check if a Number is an Armstrong Number:

```
using System;
 class Program
{
   static void Main()
   {
      Console.Write("Enter a positive number: ");
      int n = int.Parse(Console.ReadLine());
      int temp = n;
      int r, sum = 0;

      while (temp > 0)
      {
         r = temp % 10;
         sum = sum + (r * r * r);
         temp = temp / 10;
      }

      if (sum == n)
      {
         Console.WriteLine("Armstrong Number.");
      }
      else
      {
         Console.WriteLine("Not an Armstrong Number.");
      }
   }
}
```

6. TO FIND LEAP YEAR

```
using System;
class Program
{
   static void Main()
   {
      Console.Write("Enter a year: ");
      int year = int.Parse(Console.ReadLine());

      if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0))
      {
         Console.WriteLine("Leap year");
      }
      else
      {
```

```
            Console.WriteLine("Not a leap year");
        }
    }
}
```

7.PRIME NO OR NOT

```
using System;
class Program
{
    static void Main()
    {
        Console.Write("Enter any number to Check for Prime: ");
        int num = int.Parse(Console.ReadLine());
        int temp = 0;

        for (int i = 2; i <= num / 2; i++)
        {
            if (num % i == 0)
            {
                temp++;
                break;
            }
        }

        if (temp == 0 && num != 1)
        {
            Console.WriteLine("Prime number");
        }
        else
        {
            Console.WriteLine("Not a Prime number");
        }
    }
}
```

8.Fibonacci Series in C
(0, 1, 1, 2, 3, 5, 8, 13, 21_)

```
using System;
class Program
{
static void Main()
    {
        Console.Write("Enter the number of elements: ");
```

```
        int number = int.Parse(Console.ReadLine());
         int n1 = 0, n2 = 1, n3;
         Console.Write($"{n1} {n2}");
         for (int i = 2; i < number; ++i)
        {
            n3 = n1 + n2;
            Console.Write($" {n3}");
            n1 = n2;
            n2 = n3;
        }
    }
}
```

9.Factorial Program using loop

```
using System;
 class Program
{
    static void Main()
    {
        Console.Write("Enter a number: ");
        int number = int.Parse(Console.ReadLine());
        int fact = 1;
         for (int i = 1; i <= number; i++)
        {
            fact *= i;
        }
        Console.WriteLine($"Factorial of {number} is: {fact}");
    }
}
```

10.Factors of a Positive Integer

```
using System;
class Program
{
    static void Main()
    {
```

```
        Console.Write("Enter a positive integer: ");
        int num = int.Parse(Console.ReadLine());

        Console.Write($"Factors of {num} are: ");
        for (int i = 1; i <= num; ++i)
        {
           if (num % i == 0)
           {
              Console.Write($"{i} ");
           }
        }a
    }
}
```

11.swap two numbers without using third variable.

```
using System;
class Program
{
    static void Main()
    {
        int a = 10, b = 20;
        Console.WriteLine($"Before swap a={a} b={b}");
        a = a + b;
        b = a - b;
        a = a - b;
         Console.WriteLine($"After swap a={a} b={b}");
    }
}
```