Practise Program

1) Write a Program For Armstrong Number.

```
using System;
namespace demoprog
{
   class program
   {
      public static void Main(string[] args)
      {
         int num = 0, temp = 0, sum = 0, rem;
         Console.WriteLine("Enter your armstrong number");
         num = Convert.ToInt32(Console.ReadLine());
         temp = num;
         while(num > 0)
         {
            rem = num % 10;
            sum = sum + rem * rem * rem;
            num = num / 10;
         }
         if(num == temp)
         {
            Console.WriteLine(temp + " is your armstrong number!");
         }
         else
         {
            Console.WriteLine(temp + " is not your armstrong number");
         }
      }
   }
}
```

2) Write a Program For Panidrome Number.

```
using System;
namespace demoprog
{
  class program
  {
    public static void Main(string[] args)
    {
      int num = 0, sum = 0, temp = 0, rem;
      Console.WriteLine("Enter your palindrome number");
      num = Convert.ToInt32(Console.ReadLine());
      temp = num;
      while (num > 0)
      {
        rem = num % 10;
        sum = sum * 10 + rem;
        num = num / 10;
      }
      if(sum == temp)
      {
        Console.WriteLine(temp + " is your Palindrome Number");
      }
      else{
        Console.WriteLine(temp + " is your not Palindrome number");
      }
    }
  }
}
```

3) swapping two numbers without using third veriable.

```
using System;
namespace demo
{
  class program
  {
    public static void Main(string[] args)
    {
      int num1 = 10, num2 = 20;
      Console.WriteLine("Swaping two numbers");
      Console.WriteLine("Before Swapping the numbers");
      Console.WriteLine(num1 + "\n" + num2);

      num1 = num1 + num2;
      num2 = num1 - num2;
      num1 = num1 - num2;

      Console.WriteLine("After Swapping the numbers");
      Console.WriteLine(num1 + "\n" + num2);
    }
  }
}
```

4) Write a program to reverse string.

```
using System;
namespace reversestring
{
  class program
  {
    public static void Main(string[] args)
    {
      string str;
      Console.WriteLine("Enter your string");
      str = Console.ReadLine();
      str.ToLower();

      for(int i = str.Length - 1; i >= 0; i--)
      {
        Console.Write(str[i]);
      }
      Console.WriteLine("\n");
    }
  }
}
```

5) Count how many words in your string.

```
using System;
namespace CountWords
{
  class program
  {
    public static void Main(string[] args)
    {
      string str;
      int Count = 1;
      Console.WriteLine("Enter your string");
      str = Console.ReadLine();
      str.ToLower();

      for(int i = 0; i < str.Length; i++)
      {
        if (str[i] == ' ' || str[i] == '\n' || str[i] == '\t')
        {
          Count = Count + 1;
        }
      }
      Console.WriteLine("in your string " + Count + " words");
    }
  }
}
```

6) Write a program to find first & second largest number.

```
using System;
namespace largesecondnum
{
   class program
   {
      public static void Main(string[] args)
      {
         int max1, max2;
         int[] arr = { 4, 63, 78, 5, 26, 76, 55, 12, 35, };
         for(int i = 0; i < arr.Length; i++)
         {
            Console.WriteLine(arr[i]);
         }
         Console.WriteLine("\n");
         max1 = max2 = arr[0];
         for (int i = 0; i < arr.Length; i++)
         {
            if(arr[i] > max1)
            {
               max2 = max1;
               max1 = arr[i];
            }
            else if(arr[i] > max2)
            {
               max2 = arr[i];
            }
         }
         Console.WriteLine("your first MAX number : " + max1);
         Console.WriteLine("your second MAX number : " + max2);
      }
   }
}
```

7) Write a program to find first & second smollest number.

```
using System;
namespace demoprog
{
   class program
   {
      public static void Main(string[] args)
      {
         int min1, min2;
         int[] arr = { 45, 78, 12, 23, 56, 89, 37, 19, 52, 11 };
         for (int i = 0; i < arr.Length; i++)
         {
            Console.WriteLine(arr[i]);
         }
         Console.WriteLine("\n");
         min1 = min2 = arr[0];
         for (int i = 0; i < arr.Length; i++)
         {
            if (arr[i] < min1)
            {
               min2 = min1;
               min1 = arr[i];
            }
            else if (arr[i] < min2)
            {
               min2 = arr[i];
            }
         }
         Console.WriteLine("first smollest number is : " + min1);
         Console.WriteLine("second smollestnumber is : " + min2);
      }
   }
}
```

8) write program for Fibonacci Series.

```
using System;
namespace demoprog
{
   class program
   {
      public static void Main(string[] args)
      {
         int num1 = 0, num2 = 1,num3=0, range;
         Console.WriteLine("Enter your range : ");
         range = Convert.ToInt32(Console.ReadLine());
         Console.Write(num1 + " ");
         Console.Write(num2 + " ");
         while(range > 1)
         {
            num3 = num1 + num2;
            Console.Write(num3 + " ");
            num1 = num2;
            num2 = num3;
            range--;
         }
      }
   }
}
```

9) printing this pattern

```
    1
   2 1
  3 2 1
 4 3 2 1
5 4 3 2 1
```

```
using System;
namespace demoprog
{
  class program
  {
    public static void Main(string[] args)
    {
      Console.WriteLine("Enter number to pattern:");
      int num = Convert.ToInt32(Console.ReadLine());
      for (int i=1; i<=num;i++)
      {
        for (int k = 1; k <= num - i; k++)
        {
          Console.Write("  ");
        }
        for (int j = i; j >= 1; j--)
        {
          Console.Write(j + " ");
        }
        Console.WriteLine();
      }
    }
  }
}
```

10) Write a program to sorting array.

```
using System;
namespace Sorting
{
   class program
   {
      public static void Main(string[] args)
      {
         int[] arr = new int[] { 12, 8, 20, 10, 45, 30, 40, 55 };
         int temp = 0;
         for(int i = 0; i < arr.Length; i++)
         {
            for(int j = i+1; j < arr.Length; j++)
            {
               if (arr[i] > arr[j])
               {
                  temp = arr[j];
                  arr[j] = arr[i];
                  arr[i] = temp;
               }
            }
            Console.Write(" " + arr[i]);
         }
      }
   }
}
```

11) Write a program to reverse sorting array.

```
using System;
namespace Sorting
{
   class program
   {
      public static void Main(string[] args)
      {
         int[] arr = new int[] { 12, 8, 20, 10, 45, 30, 40, 55 };
         int temp = 0;
         for(int i = 0; i < arr.Length; i++)
         {
            for(int j = i+1; j < arr.Length; j++)
            {
               if (arr[i] < arr[j])
               {
                  temp = arr[j];
                  arr[j] = arr[i];
                  arr[i] = temp;
               }
            }
            Console.Write(" " + arr[i]);
         }
      }
   }
}
```

12) write a program to find factorial of number.

```
using System;
namespace sotring
{
   class program
   {
      public static void Main(string[] args)
      {
         int num, fact = 1;
         Console.WriteLine("Enter number for factorial : ");
         num = Convert.ToInt32(Console.ReadLine());
         for (int i = 1; i < num; i++)
         {
            fact = fact * i;
         }
         Console.WriteLine("the factorial of {0} is {1}", num, fact);
      }
   }
}
```

13) Find Highest Salary From Employee table in SQL.

```
select MAX(Salary)
from Employee
```

13) Find Highest Second Salary From Employee table in SQL.

```
select MAX(Salary)
from Employee
where Salary not in
(select MAX(Salary)
from Employee)
```

13) Find Smollest Salary From Employee table in SQL.

```
select min(Salary)
from Employee
```

13) Find Smollest Second Salary From Employee table in SQL.

```
select min(Salary)
from Employee
where Salary not in
(select min(Salary)
from Employee)
```