DAY 14 ASSIGNMENT

-- BY SARATH KASIMSETTY

1) Research and write what is the use of sealed class.
WACP to illustrate sealed class.

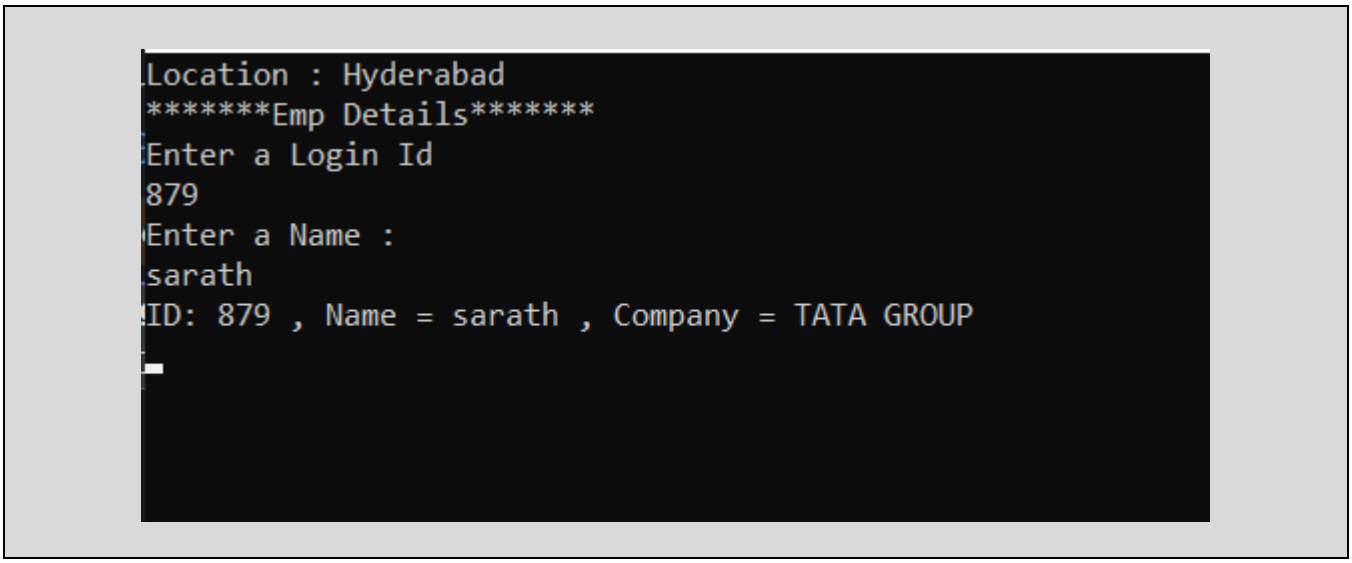
- Sealed class is used to stop a class to be inherited. You cannot derive or extend any class from it.
- Sealed method is implemented so that no other class can overthrow it and implement its own method.
- Sealed class can be a derived class but can't be a base class.
- A sealed class cannot also be an abstract class.

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//Research and write what is the use of sealed class.
//WACP to illustrate sealed class.

namespace Day14Project1
{
     class TataSteel
     {
        public int id;
        public string name;
        public static string Company = "TATA GROUP";
        public virtual void GetReadEmployee()
        {
            //Read the value from user
            Console.WriteLine("Enter a Login Id ");
            id = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter a Name :");
            name = Console.ReadLine();
        }
        public virtual void GetDisplayEmpDetails()
        {
            Console.WriteLine("ID: {0} , Name = {1} , Company = {2}", id, name,
Company);
        }
    }
```

```
     sealed class TataMotors : TataSteel
        //TataMotors is a derived of TataSteel(base)
     {

        public override void GetReadEmployee()
        {
            Console.WriteLine("Enter a Login Id ");
            id = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter a Name :");
            name = Console.ReadLine();
        }

        public override void GetDisplayEmpDetails()
        {
            Console.WriteLine("ID: {0} , Name = {1} , Company =
{2}",id,name,Company);
        }
    }
    sealed class CompanyMark
    {

        public static string CompanyLocation = "Hyderabad";

    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Location : {0}",CompanyMark.CompanyLocation);

            Console.WriteLine("*******Emp Details*******");
            TataSteel emp = new TataSteel();
            emp.GetReadEmployee();
            emp.GetDisplayEmpDetails();
            Console.ReadLine();

        }
    }
}
```

OUTPUT:



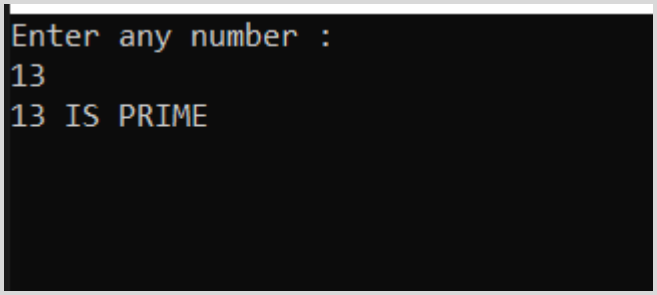
4) WACP to check if the number is prime or not using logic discussed in the class
HINT : use break;

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//WACP to check if the number is prime or not using logic discussed in the class
//HINT : use break;

namespace Day14Project4
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int n, i;
            //read value from user
            Console.WriteLine("Enter any number : ");
            n = Convert.ToInt32(Console.ReadLine());

            //logical
            for(i =2;i<=n;i++)
            {
                if (n % i == 0)
                    break;
            }
            if (n == i) // user value and loop value will be same its prime
                Console.WriteLine("{0} IS PRIME",n);
            else // If case loop is not satisfied it eill be break
```

```
                Console.WriteLine("{0} IS NOT PRIME",n);


            Console.ReadLine();
        }
    }
}
```

OUTPUT:



5. print numbers from 1 to 30 and skip the numbers divisible by 3
HINT : use continue;

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kasimsetty
//print numbers from 1 to 30 and skip the numbers divisible by 3
//HINT : use continue;

namespace Day14Project5
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int n=30, i;

            for(i=0;i<=n;i++)
            {
                if (i % 3 == 0)
                    continue;
  // loop values divisible by 3 condition true ,those number are skip and print
remaining numbers
                Console.WriteLine(i);
            }
```

```
            Console.ReadLine();


        }
    }
}
```

OUTPUT:

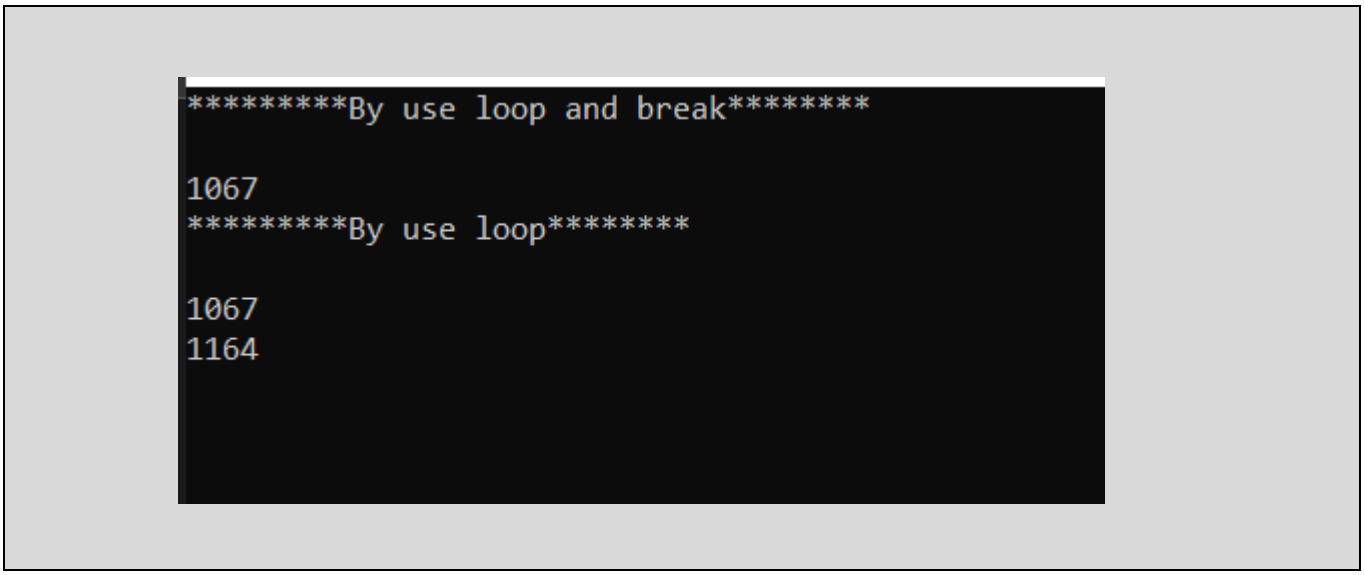
6) Find the first number after 1000 which is divisible by 97.
HINT : use for loop and break

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//sarath kadimsetty
//Find the first number after 1000 which is divisible by 97.
//HINT : use for loop and break
```

```
namespace Day14Project6
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int n = 97, i;

            Console.Write("*********By use loop and break********\n\n");
           // first number after 1000 which is divisible by 97
            for (i=1000;i<1200;i++)
            {
                if (i % n == 0)
                    break;   // if condition is true that loop is stop by
using break;

            }
            Console.WriteLine(i);

            Console.Write("*********By use loop********\n\n");
            //After numbers of 1000 which is divisible by 97
            for (i = 1000; i < 1200; i++)
            {
                if (i % n == 0)
                {
                    Console.WriteLine(i);
                }

            }


            Console.ReadLine();

        }
    }
}
```

OUTPUT:


*********By use loop and break********
1067
*********By use loop********
1067
1164