

C# .Net Programming Assignment 10

- Create separate visual Studio project for each problem statement separately.
- For Business logic write separate class.
- Use Object Oriented concepts while writing the program.

1. Write a program which creates two threads. One thread is used to check whether number is prime or not and other thread used to check whether number is perfect or not.

```
using System;
using System.Threading;
```

```
public class Marvellous
{
    int iNo;
    public Marvellous(int iValue)
    {
        iNo = iValue;
    }
```

```
    public void ChkPrime()
    {
        // Logic
    }
```

```
    public void ChkPerfect()
    {
        // Logic
    }
```

```
}
```

```
public class Infosystems
{
    public static void Main()
    {
```

```
        // Accept number from user into no
        Marvellous mobs = new Marvellous(no);
```

```
        // Create object of thread class and provide thread procedure as
        ChkPrime
        // Create object of thread class and provide thread procedure as
        ChkPerfect
        // Start the execution of both thread.
    }
```

```
}
```

2. Write a program which contains one class. Class contains array of integers in it. Create two threads one will print all numbers from that array and other will print all odd numbers from same array.

```
using System;
using System.Threading;

class MarvellousNumber
{
    public int[] arr;

    public demo(int no)
    {
        arr = new int[no];
    }

    public void Accept()
    {
        Console.WriteLine("Enter elements");
        for(int i = 0; i < arr.Length; i++)
        {
            arr[i] = Convert.ToInt32(Console.ReadLine());
        }
    }

    public void EvenDisplay()
    {
        // Logic
    }

    public void OddDisplay()
    {
        // Logic
    }
}

public class Infosystems
{
    public static void Main()
    {
        MarvellousNumber mobs = new MarvellousNumber(5);
    }
}
```

```
// Create 2 object of thread class and provide thread procedure as
OddDisplay and EvenDisplay
```

```
// Start the execution of both threads.
}
}
```

3. Write a program design one class which inherits above class i.e. MarvellousNumber. Derived class should contains two methods named as Max, Min. Create two threads which display maximum and minimum number from array.

```
using System;
using System.Threading;

class MarvellousNew : MarvellousNumber
{
    public MarvellousNew(int no):base(no)
    {}

    public void Max()
    {
        // Logic to find out maximum number
    }

    public void Min()
    {
        // Logic to find out minimum number
    }
}

public class Infosystems
{
    public static void Main()
    {
        MarvellousNew mobs = new MarvellousNew(5);

        // Create 2 object of thread class and provide thread procedure as
        Max and Min

        // Start the execution of both threads.
    }
}
```