

Lab program : 15

Ex1 Write a Java program for printing a multiplication tables of 5 and 10 upto 10 numbers through the synchronized method called printTable(int n) using two threads Thread1 and Thread2 as the output as follows and print it without synchronized method also

```
package Threads;
```

```
class Table
{
    synchronized void printTable(int n)
    {
        for(int i=1;i<=20;i++)
        {
            System.out.println(+n+"*"+i+"="+n*i));
            try
            {
                Thread.sleep(400);
            }
            catch(Exception e)
            {
                System.out.println(e);
            }
        }
    }
}
```

```
class Mythread1 extends Thread
{
    Table t;
    Mythread1(Table t)
    {
        this.t=t;
    }
    public void run()
    {
        t.printTable(5);
    }
}
```

```
class Mythread2 extends Thread
{
    Table t;
    Mythread2(Table t)
    {
```

```

        this.t=t;
    }
    public void run()
    {
        t.printTable(10);
    }
}

class WithSynchronizationMultiplicationTable
{
    public static void main(String args[])
    {
        Table obj = new Table();
        // passing Table itself as objects for threads
        Mythread1 th1 = new Mythread1(obj);
        Mythread2 th2 = new Mythread2(obj);

        th1.start();
        th2.start();
    }
}

```

o/p

```

*1=5
5*2=10
5*3=15
5*4=20
5*5=25
5*6=30
5*7=35
5*8=40
5*9=45
5*10=50
5*11=55
5*12=60
5*13=65
5*14=70
5*15=75
5*16=80
5*17=85
5*18=90
5*19=95
5*20=100
10*1=10
10*2=20
10*3=30
10*4=40
10*5=50

```

$$10*6=60$$

$$10*7=70$$

$$10*8=80$$

$$10*9=90$$

$$10*10=100$$

$$10*11=110$$

$$10*12=120$$

$$10*13=130$$

$$10*14=140$$

$$10*15=150$$

$$10*16=160$$

$$10*17=170$$

$$10*18=180$$

$$10*19=190$$

$$10*20=200$$