Extra Programs

1.

```
class SumThread implements Runnable{
	String name;
	Thread t;
	SumThread(String n)
	{
		name = n;
		t = new Thread(this,name);
		t.start();
	}
	public void run()
	{
		int sum=0;
		try {
			for(int i=1;i<=99;i+=2)
			{
				sum+=i;
				Thread.sleep(100);
			}

		} catch (InterruptedException ie) {
			System.out.println(name+" Interrupted");
		}
		System.out.println("Sum of odd numbers from 1 to 100 is : "+sum);
	}
}
public class Thread2Main {
	public static void main(String args[])
	{
		int sum=0;
		new SumThread("Odd");
		try {
			for(int i=2;i<=100;i+=2)
			{
				sum+=i;
				Thread.sleep(100);
			}
		} catch (InterruptedException ie)
		{
			System.out.println("Main Thread interrupted");
		}
		System.out.println("Sum of even numbers from 0 to 100 is "+sum);
	}
}
```

Output:

```
Sum of even numbers from 0 to 100 is 2550
Sum of odd numbers from 1 to 100 is : 2500
```

Program 2:

```
import java.util.Random;
class MyThread implements Runnable{
	String name;
	Thread t;
	static int num;
	MyThread(String n){
		name = n;
		t = new Thread(this,name);
		t.start();
	}
	public void run() {
		Random r = new Random();
		try {
		if(name=="one")
		{
			for(int i=0;i<5;i++)
			{
				num = r.nextInt(5);
				System.out.println("Random number : "+num);
				Thread.sleep(1000);
			}
		}
		if(name=="two")
		{

			for(int i=0;i<5;i++) {
			Thread.sleep(1000);
			if(num%2==0)
			System.out.println(num*num);

		}
		}
		if(name=="three")
		{

			for(int i=0;i<5;i++) {
			Thread.sleep(1000);
			if(num%2!=0)
			System.out.println(num*num*num);

		}
		}
	} catch (InterruptedException ie) {
		System.out.println(name+" Interrupted");
	}
		System.out.println(name+" Exited");
	}
}
public class Thread3Main {
	public static void main(String args[])
	{
		new MyThread("one");
		new MyThread("two");
		new MyThread("three");
	}
}
```

Output:

```
Random number : 4
16
Random number : 1
1
Random number : 0
0
Random number : 0
0
Random number : 1
1
three Exited
two Exited
one Exited
```