JOEL NINAN JOHNSON
IBM19CS199

13/12/2020

Week 11 - Practice Program 1

```
import java.util.*;
import java.lang.*;

class OddThread extends Thread {
    int odd_sum = 0;
    OddThread() {
        super("ODD Thread");
        System.out.println("Child Thread :" +this);
        start();
    }
    public void run(){
        try{
            for(int i=1; i<=100; i++){
                if(i%2!=0){
                    odd_sum = odd_sum+i;
                    Thread.sleep(100);
                }
            }
        } catch (InterruptedException e){
            System.out.println("Child Interrupted");
        }
        System.out.println("Sum of Odd Numbers from 1 to
                100 :" +odd_sum);
    }
}
```

Joel NINAN JOHNSON
1AM19CS197

```
class Thread_Practice1 {
    public static void main(String args[]){
        int even_sum=0;
        new OddThread();
        try{
            for(int i=1; i<=100; i++){
                if(i%2==0){
                    even_sum= even_sum+i;
                    Thread.sleep(200);
                }
            }
        }catch(InterruptedException e){
            System.out.println("Main Thread Interrupted");
        }
        System.out.println("Sum of even nos. from
                            1 to 100 :" +even_sum);
    }
}
```

JOEL NINAN JOHNSON
1BM19CS199

19/12/2020

Week 11 – Practice Programs 2

```
import java.util.*;

class ThreadRandom implements Runnable {
    Thread t;
    ThreadRandom() {
        t = new Thread(this, "Random Integer Thread");
        t.start();
    }
    public void run() {
        try {
            Random R = new Random();
            for (int i=0; i<5; i++) {
                int n = R.nextInt(1000);
                System.out.println("Random Integers: "+n);
                if((n%2) == 0){
                    new ThreadSq(n);
                }
                else {
                    new ThreadCu(n);
                }
                Thread.sleep(1000);
            }
        }catch(InterruptedException e) {
            System.out.println("Random Thread Interrupted");
        }
    }
}
```

JOEL NIVAN JOHNSON
1BM19CS199

18/12/2021

```
class ThreadSq implements Runnable{
        int num;
        Thread s;
        ThreadSq(int num){
                this.num = num;
                s = new Thread(this, "SquareThread");
                s.start();
        }
        public void run(){
                System.out.println("Square of "+num+"="+
                                        (num*num));
        }
}
class ThreadCu implements Runnable{
        int num;
        Thread c;
        ThreadCu(int num){
                this.num = num;
                c = new Thread(this, "Cube Thread");
                c.start();
        }
        public void run(){
                System.out.println("Cube of "+num+"
                                =" +(num*num*num));
        }
}
class ThreadPractice2{
        public static void main(String args[]){
                ThreadRandom R = new ThreadRandom();
                try{ R.t.join();
                }catch(InterruptedException e){
                        System.out.println("Main Thread Interrupted");
                }
}}
```