

# LABPROGRAM

## EXTRAPROBLEM\_2 (08/12/2020)

**Q.) GENERATE SQUARE OR  
CUBE OF RANDOMLY  
GENERATED NUMBER BY  
THREADS?**

### -----INSTRUCTIONS-----

-----

```
/*Develop a multithreaded Java program to create three threads. First  
thread generates  
random integer for every second and if the value is even, second thread  
computes the  
square of number and prints. If the value is odd, the third thread will  
print the value of  
cube of number.*/
```

```
import java.util.Random;  
class thread8 implements Runnable{  
    Thread m;  
    thread8(){  
        m = new Thread(this, "THREAD1");  
        m.start();  
    }  
  
    public void run(){  
        try {  
            Random rand = new Random();  
            for (int i=5; i>0; i--) {  
                int rand_int = rand.nextInt(10);  
                Thread.sleep(5000);  
                if (rand_int % 2 == 0) {  
                    int temp, sq;  
                    temp = rand_int;  
                    sq = temp * temp;  
                }  
            }  
        }  
    }  
}
```

```

        System.out.println("SQUARE OF: "+temp+ " :"+ sq);
        Thread.sleep(5000);
    } else {
        int temp1, cube;
        temp1 = rand_int;
        cube = temp1 * temp1 * temp1;
        System.out.println("CUBE OF: "+temp1+" :"+cube);
        Thread.sleep(6000);
    }

    }
} catch (InterruptedException e){
    System.out.println("CHILD THREADS ARE INTERRUPTED WHILE
SLEEPING");
}

}

}

class thread8Main{
    public static void main(String ss[]){
        thread8 n1 = new thread8();
    }
}

```

## -----OUTPUT-----

```

C:\Java\jdk1.8.0_261\bin\java.exe ...
SQUARE OF: 6 :36
CUBE OF: 9 :729
CUBE OF: 5 :125
SQUARE OF: 0 :0
CUBE OF: 9 :729

Process finished with exit code 0

```