**PRACTICAL – 7(3)**

**Aim: Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if**

**the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the**

**number.**

**SOURCE CODE:**

import java.util.Random;

import java.lang.Thread;

public class Practical\_7\_3 {

    public static *void* main(String[] *args*) {

        RandomNum x = new RandomNum();

        x.start();

        System.out.println("20DCE019-Yatharth Chauhan\n");

    }

}

class RandomNum extends Thread {

    Random rand = new Random();

*int* y = rand.nextInt(100);

    public *void* run() {

        if (y % 2 == 0) {

            Square s = new Square();

            s.start();

        } else {

            Cube c = new Cube();

            c.start();

        }

    }

*int* getRandom() {

        return y;

    }

}

class Square extends Thread {

    public *void* run() {

        try {

            RandomNum x = new RandomNum();

*int* y = x.getRandom();

            System.out.println("Square Of " + y + " is :" + (y \* y));

        } catch (Exception e) {

            System.out.println("An Error Has Occured");

            e.printStackTrace();

        }

    }

}

class Cube extends Thread {

    public *void* run() {

        try {

            RandomNum x = new RandomNum();

*int* y = x.getRandom();

            System.out.println("Cube Of " + y + " is :" + (y \* y \* y));

        } catch (Exception e) {

            System.out.println("An Error Has Occured");

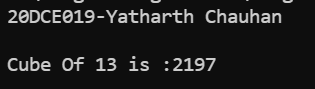
            e.printStackTrace();

        }

    }

}

**OUTPUT:**

****

**CONCLUSION:** In this program we learnt how to generate random number using random method from the math class and how to use function sleep from thread class.