

Program 8

Write a Java program that implements a multi-thread application that has three Threads. First thread generates a random integer for every 1 second; second thread computes the square of the number and prints; third thread will print the value of cube of the number.

```
import java.util.Random;
class Square extends Thread
{
    int x;
    Square(int n)
    {
        x = n;
    }
    public void run()
    {
        int sqr = x * x;
        System.out.println("Square of " + x + " = " + sqr );
    }
}

class Cube extends Thread
{
    int x;
    Cube(int n)
    {
        x = n;
    }
    public void run()
    {
        int cub = x * x * x;
        System.out.println("Cube of " + x + " = " + cub );
    }
}

class Number extends Thread
{
    public void run()
    {
        Random random = new Random();
        for(int i =0; i<5; i++)
        {
            int randomInteger = random.nextInt(100);
            System.out.println("Random Integer generated : " + randomInteger);
            Square s = new Square(randomInteger);
            s.start();
            Cube c = new Cube(randomInteger);
            c.start();
            try {
                Thread.sleep(1000);
            }
        }
    }
}
```

```

        catch (InterruptedException ex) {
            System.out.println(ex);
        }
    }
}

public class Thr {
    public static void main(String args[])
    {
        Number n = new Number();
        n.start();
    }
}

```