Program 7

7. 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.

Program code:

```
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 Rnumber extends Thread
{
     public void run()
     {
         Random random = new Random();
         for(int i =0; i<5; i++)
         {
             int randomInteger = random.nextInt(10);
             System.out.println("Random Integer generated : " +
randomInteger);
             Square s = new Square(randomInteger);
```

```java
                    s.start();
                    Cube c = new Cube(randomInteger);
                    c.start();
                    try
                {
                        Thread.sleep(1000);
                }
                catch (InterruptedException ex)
                {
                        System.out.println(ex);
                }
            }
        }
}
public class ThreadP
{
    public static void main(String[] args)
     {
            Rnumber n = new Rnumber();
            n.start();
    }
}
```