9. Write a java program that implements a multi-threaded application that has three threads. First thread generates a 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.

**PROGRAM**

import java.util.\*;

class even implements Runnable

{

public int x;

public even(int x)

{

this.x = x;

}

public void run()

{

System.out.println("New Thread "+ x +" is EVEN and Square of " + x + " is: " + x \* x);

}

}

class odd implements Runnable

{

public int x;

public odd(int x)

{

this.x = x;

}

public void run()

{

System.out.println("New Thread "+ x +" is ODD and Cube of " + x + " is: " + x \* x \* x);

}

}

class A extends Thread

{

public void run()

{

int num = 0;

Random r = new Random();

try

{

for (int i = 0; i < 5; i++)

{

num = r.nextInt(100);

System.out.println("Main Thread and Generated Number is " + num);

if (num % 2 == 0)

{

Thread t1 = new Thread(new even(num));

t1.start();

}

else

{

Thread t2 = new Thread(new odd(num));

t2.start();

}

Thread.sleep(1000);

System.out.println("--------------------------------------");

}

}

catch (Exception ex)

{

System.out.println(ex.getMessage());

}

}

}

public class multithreadprog

{

public static void main(String[] args)

{

A a = new A();

a.start();

}

}

**OUTPUT**

