LAB TEST 2

Write a program to create a thread ‘Squares’ that prints the square of numbers from 1 to 10 along with thread name. Create another thread ‘Cubes’ that print the cubes of numbers from 1 to 10 along with thread name. Set the name of main thread to “Parent Thread”. Let this print numbers from 1 to 10 along with thread name. The main thread creates the two child threads and wait for them to complete.

```
class Square extends Thread{
  int num;
  Square(int n){
    num = n;
  }
  public void run(){
    setName("**Square Thread** ");
    int sq = num*num;
    System.out.println(getName()+" Square of "+num+" = "+sq);
  }
}

class Cube extends Thread{
  int num2;
  Cube(int n2){
    num2 = n2;
  }
  public void run(){
    setName("**Cube Thread** ");
    int cub = num2*num2*num2;
    System.out.println(getName()+" Cube of "+num2+" = "+cub);
  }
}
```

```
class LabTest2{
  public static void main(String args[]){
    Thread t= Thread.currentThread();
    for(int i =1;i<=10;i++){
      Square s = new Square(i);
      s.start();
      Cube c = new Cube(i);
      c.start();
  try{
   s.join();
   Thread.sleep(2000);
   c.join();
  }
  catch(InterruptedException e1){
    System.out.println(e1);
  }
}
  t.setName("Parent Thread");
  try{
    for(int i=1;i<=10;i++){
      Thread.sleep(2000);
      System.out.println(t.getName() +" -- "+ i);
    }
  }
  catch(InterruptedException e1){
    System.out.println(e1);
  }
  }
}
```

Command Prompt

```
C:\Users\admin\Desktop\Hemang>javac OojLabTest-2.java

C:\Users\admin\Desktop\Hemang>java LabTest2
**Cube Thread**  Cube of 1 = 1
**Square Thread**  Square of 1 = 1
**Square Thread**  Square of 2 = 4
**Cube Thread**  Cube of 2 = 8
**Square Thread**  Square of 3 = 9
**Cube Thread**  Cube of 3 = 27
**Square Thread**  Square of 4 = 16
**Cube Thread**  Cube of 4 = 64
**Square Thread**  Square of 5 = 25
**Cube Thread**  Cube of 5 = 125
**Square Thread**  Square of 6 = 36
**Cube Thread**  Cube of 6 = 216
**Square Thread**  Square of 7 = 49
**Cube Thread**  Cube of 7 = 343
**Square Thread**  Square of 8 = 64
**Cube Thread**  Cube of 8 = 512
**Square Thread**  Square of 9 = 81
**Cube Thread**  Cube of 9 = 729
**Square Thread**  Square of 10 = 100
**Cube Thread**  Cube of 10 = 1000
Parent Thread -- 1
Parent Thread -- 2
Parent Thread -- 3
Parent Thread -- 4
Parent Thread -- 5
Parent Thread -- 6
Parent Thread -- 7
Parent Thread -- 8
Parent Thread -- 9
Parent Thread -- 10

C:\Users\admin\Desktop\Hemang>
```