

```

1  -----ThreadLocalTask.java-----
2  package com.ameya.tasks;
3
4  import java.util.Date;
5  import java.util.concurrent.TimeUnit;
6  import java.util.concurrent.atomic.AtomicInteger;
7
8  public class ThreadLocalTask implements Runnable {
9      private static final AtomicInteger nextId=new AtomicInteger(0);
10     private static final ThreadLocal<Integer> threadId=new
        ThreadLocal<Integer>() {
11         @Override
12         protected Integer initialValue() {
13             return nextId.getAndIncrement();
14         }
15     };
16     public int getThreadId() {
17         return threadId.get();
18     }
19     private static final ThreadLocal<Date> startDate=new
        ThreadLocal<Date>() {
20         protected Date initialValue() {
21             return new Date();
22         }
23     };
24     @Override
25     public void run() {
26         System.out.printf("Starting Thread : %s :
        %s\n",getThreadId(),startDate.get());
27         try {
28             TimeUnit.SECONDS.sleep((int)Math rint(Math.random()*10));
29         }catch(InterruptedException e) {
30             e.printStackTrace();
31         }
32         System.out.printf("Thread Finished : %s :
        %s\n",getThreadId(),startDate.get());
33     }
34
35 }
36 -----TestThreadLocal.java-----
37 package com.ameya.test;

```

```
38
39 import com.ameya.tasks.ThreadLocalTask;
40
41 public class TestThreadLocal {
42
43     public static void main(String[] args) {
44         new Thread(new ThreadLocalTask()).start();
45         try {
46             Thread.sleep(2000);
47         } catch (InterruptedException e) {
48             e.printStackTrace();
49         }
50         new Thread(new ThreadLocalTask()).start();
51         try {
52             Thread.sleep(2000);
53         } catch (InterruptedException e) {
54             e.printStackTrace();
55         }
56         new Thread(new ThreadLocalTask()).start();
57
58     }
59
60 }
61
62
```