```
-----Messager.java-----
 1
    package com.ameya.util;
 2
 3
    import java.util.Date;
 4
    import java.util. Vector;
 5
 6
 7
    public class Messager {
       final static int SIZE=5:
 8
       Vector<String> msgVector=new Vector<String>();
 9
       boolean msqMonitor=false;
10
       public synchronized void putMessage() {
11
           while(msqMonitor) {
12
13
              try {
14
                  wait();
              } catch (InterruptedException e) {
15
                  e.printStackTrace();
16
17
              }
           }
18
19
              String msg=new Date().toString();
              msqVector.addElement(msq);
20
               System.out.println("Message Added !! "+msg);
21
              if(msqVector.size()==SIZE) {
22
23
                  msqMonitor=true;
24
                  notify();
25
              }
26
27
28
29
       public synchronized void getMessage() {
30
              while(!msgMonitor) {
                  try {
31
32
                      wait();
33
                  } catch (InterruptedException e) {
                      e.printStackTrace();
34
                  }
35
36
              }
              String msg=msgVector.firstElement();
37
              msgVector.removeElement(msg);
38
              System.out.println("Removed msg :: "+msg);
39
               if(msqVector.size()==0) {
40
                  msqMonitor=false;
41
```

```
42
                  notify();
              }
43
       }
44
45
46
              ----MessageProducer.java-----
    package com.ameya.threads;
47
48
49
    import com.ameya.util.Messager;
50
    public class MessageProducer extends Thread{
51
52
       private Messager messager;
       public MessageProducer(Messager messager) {
53
54
           this.messager=messager;
55
           start();
56
       }
       public void run() {
57
58
              while(true) {
59
                  messager.putMessage();
60
                  try {
61
                     Thread.sleep(3000);
                  } catch (InterruptedException e) {
62
                     e.printStackTrace();
63
64
                  }
65
              }
66
       }
67
68
69
               ----MessageConsumer.java----
    package com.ameya.threads;
70
71
72
    import com.ameya.util.Messager;
73
74
    public class MessageConsumer extends Thread{
75
76
       private Messager messager;
       public MessageConsumer(Messager messager) {
77
78
           this.messager=messager;
79
                  start();
80
       }
       public void run() {
81
           while(true) {
82
```

```
83
               messager.getMessage();
 84
               try {
                  Thread.sleep(3000);
 85
               } catch (InterruptedException e) {
 86
                  e.printStackTrace();
 87
 88
              }
           }
 89
90
        }
 91 }
92
             -----TestInterThreadCommunication.java----
 93
    package com.ameya.test;
94
95
    import com.ameya.threads.MessageConsumer;
96
    import com.ameya.threads.MessageProducer;
97
    import com.ameya.util.Messager;
98
99
    public class TestInterThreadCommunication {
100
101
        public static void main(String[] args) {
102
           Messager messager=new Messager();
103
           new MessageProducer(messager);
104
           new MessageConsumer(messager);
105
106
        }
107
108 }
109
```