

```
1: // $Id: synchclick.java,v 1.1 2012-05-23 21:31:53-07 - - $
2:
3: //
4: // Synchronized clicking of a counter.
5: // When one thread enters counter, the other must wait.
6: //
7:
8: import static java.lang.System.*;
9:
10: class synchclick {
11:
12:     static class counter {
13:         private int count = 0;
14:         synchronized void click() {
15:             ++count;
16:         }
17:     }
18:
19:     static class synchr implements Runnable {
20:         int ident;
21:         counter counted;
22:         synchr (int idinit, counter countinit) {
23:             ident = idinit;
24:             counted = countinit;
25:         }
26:         public void run() {
27:             out.printf ("synchr %d starting%n", ident);
28:             out.flush();
29:             for (int itor = 0; itor < 1000000; ++itor) counted.click();
30:             out.printf ("synchr %d finished, count = %d%n",
31:                 ident, counted.count);
32:             out.flush();
33:         }
34:     }
35:
36:     public static void main (String[] args) {
37:         out.printf ("main starting%n");
38:         out.flush();
39:         counter counted = new counter();
40:         Thread synchr1 = new Thread (new synchr (1, counted));
41:         Thread synchr2 = new Thread (new synchr (2, counted));
42:         synchr1.start();
43:         synchr2.start();
44:         out.printf ("main finished, count = %d%n", counted.count);
45:         out.flush();
46:     }
47:
48: }
49:
50: //TEST// runprog -x synchclick.lis synchclick
51: //TEST// mkpspdf synchclick.ps synchclick.java* synchclick.lis
52:
```

[illegible]

```

1:
2: .....
3: log: synchclick.log
4: .....
5:
6:     1  Script   : /afs/cats.ucsc.edu/courses/cmcs012b-wm/bin/runprog
7:     2  limit c  :      0 max core file size (KB)
8:     3  limit f  : 4194303 max output file size (KB)
9:     4  limit t  : 4294967295 max CPU time (sec)
10:    5  stdin    : /dev/null
11:    6  stdout   : synchclick.out
12:    7  stderr   : synchclick.err
13:    8  log      : synchclick.log
14:    9  listing  : synchclick.lis
15:   10  Command  : synchclick
16:   11  starting: pid 9555: 19:33:17.00
17:   12  finished: pid 9555: 19:33:17.00, real 0.00, user 0.38, sys 0.03
18:   13  pstatus: 0x0000 EXIT STATUS = 0
19:
20: .....
21: stdin: /dev/null
22: .....
23:
24:
25: .....
26: stdout: synchclick.out
27: .....
28:
29:     1  main starting
30:     2  main finished, count = 0
31:     3  synchr 1 starting
32:     4  synchr 2 starting
33:     5  synchr 1 finished, count = 1900845
34:     6  synchr 2 finished, count = 2000000
35:
36: .....
37: stderr: synchclick.err
38: .....
39:

```