```
 1 // threadtest.cc
 2 //  Simple test case for the threads assignment.
 3 //
 4 //  Create two threads, and have them context switch
 5 //  back and forth between themselves by calling Thread::Yield,
 6 //  to illustratethe inner workings of the thread system.
 7 //
 8 // Copyright (c) 1992-1993 The Regents of the University of California.
 9 // All rights reserved.  See copyright.h for copyright notice and limitation
10 // of liability and disclaimer of warranty provisions.
11
12 #include "copyright.h"
13 #include "system.h"
14
15 //----------------------------------------------------------------------
16 // SimpleThread
17 //  Loop 3 times, yielding the CPU to another ready thread
18 //  each iteration.
19 //
20 //  "which" is simply a number identifying the thread, for debugging
21 //  purposes.
22 //----------------------------------------------------------------------
23
24 void
25 SimpleThread(_int which)
26 {
27     int num;
28
29     for (num = 0; num < 3; num++) {
30     printf("*** thread %d looped %d times\n", (int) which, num);
31         currentThread->Yield();
32     }
33 }
34
35 //----------------------------------------------------------------------
36 // ThreadTest
37 //  Set up a ping-pong between two threads, by forking a thread
38 //  to call SimpleThread, and then calling SimpleThread ourselves.
39 //----------------------------------------------------------------------
40
41 void
42 ThreadTest()
43 {
44     DEBUG('t', "Entering SimpleTest");
45
46     Thread *t1 = new Thread("child1");
47     t1->Fork(SimpleThread, 1, 0);
48     Thread *t2 = new Thread("child2");
49     t2->Fork(SimpleThread, 2, 0);
50     SimpleThread(0);
51 }
52
53
```