```
 1: // $Id: hellorunnable.java,v 1.4 2018-05-17 16:09:15-07 - - $
 2:
 3: // Hello World example using two threads.
 4: // class greeter implements Runnable.
 5:
 6: import static java.lang.System.*;
 7: import static java.lang.String.*;
 8:
 9: class hellorunnable {
10:    static long nanostart = nanoTime();
11:
12:    static void print (String fmt, Object... args) {
13:       Thread self = Thread.currentThread();
14:       double millisec = (nanoTime() - nanostart) / 1e6;
15:       String ident = format ("%10.3f: %s(%d): ",
16:                                 millisec, self.getName(), self.getId());
17:       String message = format (fmt, args);
18:       out.println (ident + message);
19:       out.flush();
20:    }
21:
22:    static class greeter implements Runnable {
23:       String threadname;
24:       long delay_msec;
25:       greeter (String _threadname, int _delay_msec) {
26:          threadname = _threadname;
27:          delay_msec = _delay_msec;
28:       }
29:       public void run() {
30:          Thread self = Thread.currentThread();
31:          self.setName (threadname);
32:          print ("starting");
33:          for (int count = 0; count < 10; ++count) {
34:             try {
35:                Thread.sleep (delay_msec);
36:             }catch (InterruptedException exn) {
37:                print ("interrupted: %s", exn.getMessage());
38:             }
39:             print ("slept %d msec, cycle %d", delay_msec, count);
40:          }
41:          print ("finished");
42:       }
43:    }
44:
45:    public static void main (String[] args) {
46:       print ("starting");
47:       Thread hello = new Thread (new greeter ("Hello", 500));
48:       Thread world = new Thread (new greeter ("World", 800));
49:       hello.start();
50:       world.start();
51:       print ("finished");
52:    }
53:
54: }
55:
56: //TEST// ./hellorunnable >hellorunnable.out
57: //TEST// mkpspdf hellorunnable.ps hellorunnable.java* hellorunnable.out
```

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1: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: starting hellorunnable.java
2: hellorunnable.java:
3:      $Id: hellorunnable.java,v 1.4 2018-05-17 16:09:15-07 - - $
4: javac -Xlint hellorunnable.java
5: jar cfm hellorunnable Manifest hellorunnable$greeter.class hellorunnable
.class
6: chmod +x hellorunnable
7: rm -f hellorunnable$greeter.class hellorunnable.class
8: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: finished hellorunnable.java
```

```
 1:        0.047: main(1): starting
 2:        9.085: Hello(8): starting
 3:        9.373: main(1): finished
 4:       10.368: World(9): starting
 5:      509.654: Hello(8): slept 500 msec, cycle 0
 6:      810.789: World(9): slept 800 msec, cycle 0
 7:     1010.289: Hello(8): slept 500 msec, cycle 1
 8:     1511.005: Hello(8): slept 500 msec, cycle 2
 9:     1611.429: World(9): slept 800 msec, cycle 1
10:     2011.660: Hello(8): slept 500 msec, cycle 3
11:     2412.081: World(9): slept 800 msec, cycle 2
12:     2512.308: Hello(8): slept 500 msec, cycle 4
13:     3012.982: Hello(8): slept 500 msec, cycle 5
14:     3212.689: World(9): slept 800 msec, cycle 3
15:     3513.579: Hello(8): slept 500 msec, cycle 6
16:     4013.227: World(9): slept 800 msec, cycle 4
17:     4014.102: Hello(8): slept 500 msec, cycle 7
18:     4514.716: Hello(8): slept 500 msec, cycle 8
19:     4813.786: World(9): slept 800 msec, cycle 5
20:     5027.539: Hello(8): slept 500 msec, cycle 9
21:     5035.969: Hello(8): finished
22:     5614.382: World(9): slept 800 msec, cycle 6
23:     6416.292: World(9): slept 800 msec, cycle 7
24:     7216.916: World(9): slept 800 msec, cycle 8
25:     8017.480: World(9): slept 800 msec, cycle 9
26:     8017.876: World(9): finished
```