```
 1  // Example 7.1 joi/examples/RumpelStiltskinDemo.java
 2  //
 3  //
 4  // Copyright 2003 Bill Campbell and Ethan Bolker
 5
 6  // Practice with simple exceptions - some from the API, one declared here
 7
 8  public class RumpelStiltskinDemo
 9  {
10      public static void main( String[] args )
11      {
12          Wizard rumpelstiltskin = new Wizard("RumpelStiltskin");
13          Wizard aNullWizard     = null;
14
15          // see if the first command line argument ( args[0] )
16          // is the right name
17          try {
18              System.out.println("Is your name " + args[0] +'?');
19              rumpelstiltskin.guessName(args[0]);
20              System.out.println("Yes! How did you guess?");
21              System.exit(0);
22          }
23          // come here right away if there is no args[0]
24          catch (IndexOutOfBoundsException e) {
25              System.out.println( "usage: java RumpelStiltskinDemo guess");
26              System.exit(0); // leave the program gracefully
27          }
28          // come here from guessName if exception thrown
29          catch (BadGuessException e) {
30              System.err.println("sorry - " + args[0] + " is not my name");
31          }
32
33          System.out.println(
34             "\nIntentionally generate a NullPointerException,\n" +
35             "see what the Exception's toString method returns");
36          try {
37              aNullWizard.guessName("who am I?");
38          }
39          catch (Exception e) {
40              System.out.println(e);
41          }
42
43          System.out.println(
44             "\nExperiment with the printStackTrace() method:");
45          try {
46              rumpelstiltskin.makeMischief();
47          }
48          catch (Exception e) {
49              e.printStackTrace();
50          }
51
52          // perhaps throw an uncaught IndexOutOfBoundsException
53          System.out.println(
54              "\nLook for a second command line argument,\n" +
55              "see what happens if it's not there:" );
56          System.out.println(args[1]);
```



```
57      }
58
59      // two inner classes, used only in this file
60      private static class Wizard
61      {
62          private String name;
63
64          public Wizard( String name )
65          {
66              this.name = name;
67          }
68
69          public void guessName( String name )
70              throws BadGuessException
71          {
72              if (!name.equals(this.name))
73                  throw new BadGuessException( );
74          }
75
76          public void makeMischief()
77              throws BadGuessException
78          {
79              this.guessName("??");
80          }
81      }
82
83      private static class BadGuessException extends Exception
84      {
85          // empty body
86      }
87  }
```