



created: 04/27/00; revised: 07/06/02, 06/07/03, 07/20/06, 08/06/2011

CHAPTER 80 — Exceptions

Chapter Topics:

- Exceptions and Errors
- Runtime Exceptions
- Arithmetic Exceptions
- `try`, `catch`, and `finally` statements
- User-friendly programs

A program often encounters problems as it executes. It may have trouble reading data, there might be illegal characters in the data, or an array index might go out of bounds. The Java `Exception` class enables you to deal with such problems. Using it, you can write programs that recover from problems and keep on running. This is important. Most programs should not crash when the user makes an error!

Input and output is especially error prone. Exception handling is essential for I/O programming, the topic of the next several chapters.

QUESTION 1:

Inspect the following. What went wrong?

```
C:\cs151\chap80>java Square
Enter an integer: rats
Exception in thread "main" java.util.InputMismatchException
    at java.util.Scanner.throwFor(Unknown Source)
    at java.util.Scanner.next(Unknown Source)
    at java.util.Scanner.nextInt(Unknown Source)
    at java.util.Scanner.nextInt(Unknown Source)
    at Square.main(Square.java:12)
```

C:\cs151\chap80>

