

## Section 6 Lesson 3: Handling Errors

### Try It: Practice Activities

#### Objectives

- Describe the different kinds of errors that can occur and how they are handled in Java
- Describe what exceptions are used for in Java
- Determine what exceptions are thrown for any foundation class
- Write code to handle an exception thrown by the method of a foundation class

#### Vocabulary

Identify the vocabulary word for each definition below.

|  |  |
|--|--|
|  | A keyword in Java that signals the following block of code handles a specified exception.    |
|  | An exception that is optional to be handled.   |
|  | An exception that <b>MUST</b> be handled.  |
|  | Indicates that there is a problem with interpreting your program.                            |
|  | This stops the interpreter from running the rest of the code until it finds a <i>catch</i> . |
|  | An error that indicates an issue with coding format.   |
|  | An error that occurs while the program is running, also known as an exception.               |
|  | An error that occurs as a result of incorrect programmer logic.                              |
|  | A block of code that handles exceptions by dealing with the exception if it is thrown.       |
|  | Errors that occur during run-time and can be corrected or <i>handled</i> by your code.       |

#### Try It/Solve It

1. Describe the difference between a syntax error, a logic error, and an exception.
2. What is wrong with the following code?

```
String str = "Hello World";  
  
for(int i = 0; i < 4; i++);  
  
{
```

```
        System.out.println(str);  
  
        str+= "!"  
  
    }
```

3. Describe an exception that you have experienced in your program before. Explain how it could be handled with a try/catch block of code.
4. Write a segment of code that has:

A syntax error.

A logic error.

An exception.

5. What is the difference between a checked exception and an unchecked exception?