Java Fundamentals
6-2: Handling Errors
Practice Activities

Lesson 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 MUST 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 *catch*.
	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 *handled* 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? It should print "Hello World!" four times to the screen.

```java
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. A syntax error

   b. A logic error

   c. An exception

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