

Java Fundamentals

3-3: Source Code and Documentation

Practice Activities

Lesson Objectives:

- Demonstrate source code changes to invoke methods programmatically
- Demonstrate source code changes to write an if decision statement
- Describe a method to display object orientation

Vocabulary:

Identify the vocabulary word for each definition below.

	Multiple methods executed by Greenfoot in the order in which they are written in the program.
	Tells the object which methods to perform, and in what order.
	Describe what the code does to other humans. Greenfoot does not read it, nor does it impact the functionality of the program.
	Statement written to tell your program to execute a set of instructions only if/when a certain condition is true.
	A set of comments that the programmer can modify to let others who view the source code know what the class is, what it does, the author of the code, and the date it was last modified.

Try It/Solve It:

1. True or false: Source code is the blueprint that defines how your program functions.
2. Open the code editor for an Actor subclass. Identify each component of the code editor.
3. Open the code editor for an Actor subclass. Modify the class description to include your name, a description of the class, and the version number or date it was last modified.
4. In the act() method for an Actor subclass, program the class to move 3 steps whenever the Act or Run buttons are clicked in the environment.
5. Write the method signature for the act() method.
6. In the act() method, invoke methods to make the instances of your class move and turn. In the comments section, write comments that describe what the act method does. ()
7. In the act() method for an Actor class, write an if-statement that makes an object turn 10 degrees if a specific condition is true.
8. Position 5 instances in the world, and inspect the orientation of each. Create a table that lists the x and y coordinates of each instance.