Presenting an algorithm in English
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Steps (of an algorithm) written in English are commands to do something

A description of execution of a Java statement is an algorithm, giving the sequence of steps to be carried out. Let's take a look at another kind of algorithm, a cooking recipe.

Here is the start of a recipe taken from the internet for making refrigerator dill pickles. We show the first three steps. Each step is written as a *command* to do something. It doesn't say *who* is to execute the statement.

We use the same style when writing an algorithmic step in English: We write a command to do something. That's how we present execution of the assignment statement:

> Evaluate the <expression>.
> Store its value in the <variable>.

Part of a recipe for making pickles

Stir water, vinegar, sugar, and sea salt together in a saucepan over high heat.

Bring to a boil.

Remove from heat and cool completely.

When *you* write algorithmic steps in English, make them commands, as every cooking recipe does.

How not to write a command

In describing the assignment statement, many write sentences like this:

1. Java evaluates the expression …
2. The computer will store …
3. Space is allocated in the computer …

First, Java doesn't do anything. It is just a programming language. Saying that Java evaluates something is not correct, although we all —including the instructors— do it sometimes. Try not to do it. A person or a computer is doing the evaluation, not Java.

Second, sentences 2 and 3 suggest that only a computer can execute a Java statement. But *we can execute the statement too!*

If cooking recipes were to be written in the form of sentences 2 and 3, they would contain sentences like:

> The chef stirs water, vinegar, sugar, and sea salt together in a saucepan over high heat.

> In the chef's kitchen, there is a stove, and the chef puts the pot on it and brings the contents to a boil.

Part of a recipe for making pickles

The chef stirs water, vinegar, sugar, and sea salt together in a saucepan over high heat.

In the chef's kitchen, there is a stove and the chef puts the pot on it and brings it to a boil.

You laugh at this! But realize that *many* people use this style in describing Java statements and other algorithms..

Don't do that. Instead, use the style used in all cooking recipes.