

## Pseudocode Guidelines

Some problems on the written assignments ask you to give an algorithm to solve a problem in pseudocode. Pseudocode means that you don't have to write every line in Java with correct syntax; English explanations of operations are acceptable. If you find yourself writing something that is specific to the Java programming language, you are probably getting too specific.

Note that the general rule you should follow is that you can substitute English for any  $\mathcal{O}(1)$  operation, but not for more complex steps.

Thus, the following would *not* be acceptable:

```
scan the list and count all elements greater than x
```

While the following *would* be acceptable:

```
while list has more elements {
    increment counter if current element is greater than x
    move to next element of list
}
```

The idea is that you don't have to give all the nitty-gritty coding details (that's what the programming assignments are for), but you should demonstrate a clear understanding of what your algorithm does and where those nitty-gritty details would have to go.

In general you can write math expressions without worrying about Java quirks (e.g.  $2^{n+3} + 17 \geq 5$  would be fine for a boolean in an if-check). You should feel free to use constructs like `objects` and `null`, but shouldn't rely on how Java uses them (for example, you should not assume that `hashCode` is implemented, because that's a Java-specific requirement). If you need to compare objects, you can use `>`, `<`, `=`, etc. as long as they would be clear from the description of the object (instead of `compareTo`).

Please either use `{ }` or be very careful to use indentation correctly to indicate blocks of code.