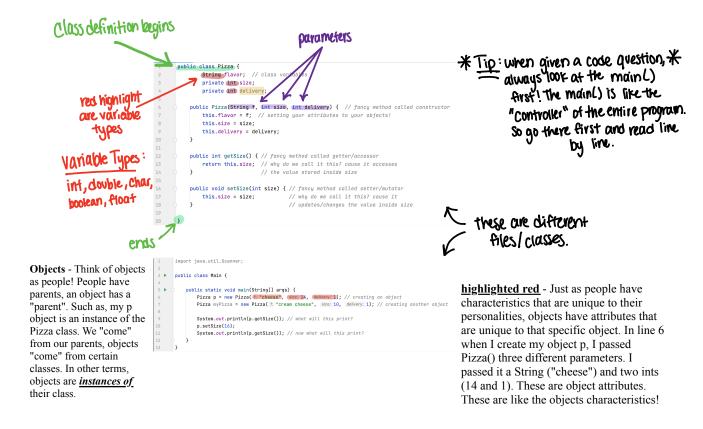
CS 163/164 Exam 1 Review

L02, L03 - TA: Lee Ann Dunn



Expressions and Operators

- · >, >=, <, <=, ==, !=
- Remember, these operators are only for comparing numbers! Never strings because you cannot compare Objects.

Methods

• methods are just blocks of code that execute a certain task. Such as, computePizzaPrice() will most likely do math inside of the method and return the correctly calculated pizza price. Keep in mind that every time you see "nameOfMethod()" that is a <u>method call</u>. If you see a method call at any point in a program, it will go to that method, execute the code inside the method, then return to the line in which that method was called.

Strings

Strings are objects in Java. They are a sequence of characters in quotations (""). Such as, when you see "Hello, World", this is considered a <u>String literal</u>. The console will print out verbatim, what is inside those quotes.

Modulo

Modulo is a mathematical operator. It gives you the remainder of a number. Such as,
 10 % 3 // this equals 1
 20 % 5 // this equals 0

Branching

```
int x = 20;
if (x > 30){
    System.out.println("greater than 30!");
}
else if (x > 20) { // won't go into here because 20 == 20 *not* 20 > 20
    System.out.println("greater than 20!");
}
else if(x >= 20) { // it will go here because it checks whether its > or whether it's ==
    System.out.println("greater than or equal to 20!");
}
else { // once it finds it's match, it'll skip the rest of the branches! (it'll skip this)
    System.out.println("no match :( ");
}
```

For Loops

```
declaration consistenal operation

for (int i = 0; i < 10; i++) {

System.out.print(i + ", ");
} // prints: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9,

// it starts off with i=0 then checks the condition i<0

// which is true so it increments i to 1. therefore, next

// time it comes back to the condition, i will be 1.
```

While Loops

```
while (x > 0) {
    System.out.println("still greater than 0!");
}

do-while loops

do { // do while loops will always *do* first, even if the condition is wrong!
    System.out.println("x is " + x);
}
while (x > 0);
```