

CS 514 – Fall 2025  
Prelab 3  
Instructor: Nancy Stevens

## INTRODUCTION:

In this lab you will edit a few Java files to become familiar with coding and working in an IDE.

After your modifications and fix-ups, you will upload your Java source code files to your GitHub repository.

## Correcting Broken Java Programs

Java has many similarities to Python, but also some key differences. In this lab, we will explore two areas where Java is different from Python: class-based syntax and typed variables. You will do this by taking some Java programs that are not legal Java and fixing their errors.

The programs listed below are in the cs514 course repository in the **day03** directory. Copy the programs to your **myWork/prelab3** directory and try compiling and running them.<sup>1</sup> Look at the errors you get and fix them, so the output is correct. Then push the programs to your GitHub repository: in your **myWork/prelab3** directory, type

```
git add *.java
git commit -m "Put your comments here"
git push
```

**Program01** Hint: the name of the class needs to match the name of the file

- Debug so the two text strings print successfully when the program is compiled and run

**Program02** Hint: there are two syntax errors in this program

- Fix the code to include the tip. The tip only applies to the pizza price, not the tax!

**Program03** Hint: focus on the different types; maybe boolean is not needed? Try using ints, floats, etc

- Debug so the program compiles. Fix the variable formulas so that each variable has the correct value. Do not simply print '365' but rather fix the existing calculation.

**Program04**

- Debug the program so it runs. Don't change any of the number values, just the variable types.

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<sup>1</sup> You must run `javac ProgramName.java` and then `java ProgramName` .