

# Lab 8 Java Basics

## UWYO COSC 2030

### 1 Lab: Java

This lab is focused around the basics of Java. You will likely need to learn about the Character and Collections classes in Java. Specifically, their methods

- `isLetter()` and `toLowerCase()` methods of Character class
- `.sort()` method of Collections class

Below are links to resources on each Class from two popular sites:

Java Documentation: <https://docs.oracle.com/javase/8/docs/api/java/lang/Character.html>

GeeksforGeeks Guide: <https://www.geeksforgeeks.org/collections-in-java-2/>

Remember to look at the Java lecture slides and the online Java documentation to learn the syntax. Search engines are your friends when learning how to do something a new programming language!

You can do this lab in Visual Studio so that you have syntax highlighting and intellisense or you can use onlineGDB's Java compiler.

To make sure that your java program will compile correctly, compile it on linux using `"javac lab8.java"`, where the class name matches the file name (case sensitive). Then run it using `"java lab8"`.

### 2 Lab: Assignment

Github Classroom Link: <https://classroom.github.com/a/CMIiZmDi>

Your java program will:

- Read in an "input.txt" file
- Process each word, keeping only the letters while also setting them to lowercase
- Add each processed word to a vector
- Once all the words are added to the vector, sort the vector alphabetically
- Finally, the program must print the contents of the vector to the console or to an "output.txt" file

Make note of which option you choose inside your readme file in your github repo.

### 3 Turn in on Github. Make sure you include a readme with your name and lab section.