

## Introduction to Computer Science 2

### Lab 6: Exception Handling and Streams

#### Learning Goals:

- To learn how to use exception handling.
- To learn how to process streams and files.

#### Exercise 1 (3 points)

Write a program that asks a user for a file name and prints the number of characters, words, and lines in that file.

#### Exercise 2 (3 points)

Write a program `Find` that searches all files specified on the command line and prints out all lines containing a reserved word given as the first parameter. For example, if you call:

```
java Find ring report.txt address.txt Homework.java
```

Then the program might print:

```
report.txt: has broken up an international ring of DVD bootleggers
address.txt: Kris Kringle, North Pole
address.txt: Home Simpson, Springfield
Homework.java: String filename;
```

#### Exercise 3 (4 points)

You should modify the `BanAccount` class to throw an `IllegalArgumentException` when the account is constructed with a negative balance, when a negative amount is deposited, or when the amount that is not between 0 and the current balance is withdrawn. Write a test program that causes all the three exceptions to occur and that catches them all.

**Honor code, coding style, and deliverable:**

Try to solve the exercises with what you already know. You are welcome to expand your program to do extra things but they are not mandatory.

**Plagiarism is not allowed!** We will run sophisticated software that automatically detects similarities on source code among students. All plagiarism incidents will be immediately reported to the Board of Examiners

**Submission!**

**Submit your java files to Canvas.**

**Ask your instructor in case there is a problem with your submission.**

**DO NOT SEND SUBMISSIONS VIA EMAIL  
YOUR LAB WILL NOT GET GRADED!**