All assignments are individual work. We use <u>MOSS</u> to detect software plagiarism. Any evidence of copying will be considered a breach of academic honesty and will be dealt with accordingly (see <a href="https://www.cse.yorku.ca/admin/coscOnAcadHonesty.html">www.cse.yorku.ca/admin/coscOnAcadHonesty.html</a> for more information).

Assignment 3 will be due after the strike ends. An exact due date will be announced once the strike is over.

Both questions below defines a new package, i.e., source directory: A3Q1, A3Q2. You should create these directories in your userspace and download the .java source files to the appropriate directories. However, note that you need only submit one source file for Q1 (BSTRange.java) and one source file for Q2 (DoubleProbeHashMap.java), and these can both be submitted the same way: see detailed instructions below. You do not need to submit the files you do not change.

Do not change the package name at the top of each file: we depend on these when we compile and test your programs.

For each question, a test program is provided that will allow you to test your code. This test program does not exhaustively test all functionality: you should test your program on a wider range of conditions than specified in the test program. A different test program, typically testing a broader range of conditions, will be used to grade your assignment.

Your methods should be able to handle error conditions as specified, throwing the appropriate exceptions, which will be caught by our testing programs. This will be part of the evaluation.

Please note that to get full marks, your program must:

- 1. Pass all test cases (produce the correct output and/or exceptions for each input)
- 2. Have the correct asymptotic run time (if specified)

Question 1. Range in BST (50 marks)

**Question 2. Double Hashing (50 marks)** 

## **Submitting your Programming Assignments**

All assignments will be submitted electronically using web submit.

## **Detailed Submission Instructions:**

- Navigate to the sub-directory corresponding to your assignment. For example, the submission directory for Assignment 3 will be called **assign3**. Please make sure you select the right directory: **Files submitted to the wrong directory will not be graded**.
- Submit all .java files required for the assignment. **Do not submit compiled .class files: These will not be graded.**
- You may submit a file several times. A new submission will overwrite the previous version. A confirmation message will be displayed for each successful submission. Please make sure that you are in the correct directory when you issue the submit command, and check the contents of the file you submit immediately before submitting it. We are not responsible for "lost" files.
- Use the file names and method names as specified for each question. **Do not change them** (e.g., switch upper to lower case). If you do, your program may not compile or run correctly with our test programs.