## BEGIN BY HAVING MATE TERMINAL, NEDIT, GMAIL, & GOOGLE DRIVE OPEN

- 1. Enter "\$ script "
  - a. Will print: "Script started..."
- 2. Enter "\$ pwd "
  - a. Will print: /home/students/j\_pilafas
- 3. Enter "\$ cat progname.info"
  - a. Will print information file\*
- 4. Enter "\$ cat progname.cpp ". Repeat for every '.h' and '.cpp' file if using a libraries
  - a. Will print all code found in these files
- 5. Enter "\$ CPP progname". List all '.cpp' files if using libraries
  - a. Will print any error or warning messages that need to be addressed.
  - b. Ideally, nothing will be printed after entering this command.
- 6. Enter "\$ ./progname.out ". Run 3-5 tests of the program to show a good example of debugging efforts.
  - a. Will print the entire program, showcasing its functionality, success, and smoothness.
- 7. Enter "\$ cat progname.tpq"
  - a. Will print though-provoking questions file\*\*
- 8. Enter "\$ exit"
  - a. Will print: "Script done..."
- 9. Enter "\$ script-print Pilafas-Jonathan-progname"
  - a. Will print: "typescript" printed to "Pilafas-Jonathan-progname.pdf".
- 10. Open "WinSCP"
  - a. Search under Cortana search and open the program
- 11. Instructions on navigating WinSCP to retrieve PDF
  - a. Click ares.harpercollege.edu → Press "Login"
  - b. Press "Yes" to the warning message if shown
  - c. Typer HarperID username into the username and press "OK"
  - d. Press "Continue" to the Authentication Banner if shown
  - e. Enter HarperID password into the password and press "OK"
  - f. Scroll through the menu shown on the right-hand side (the menu title is the same thing that was printed after completing Step 2 above).
  - g. Right-click on the PDF that you just created and press "Open" and you will be able to view the PDF in the Adobe Reader on your computer.
  - h. In the Adobe Reader, press "File", press "Save As", and save PDF to computer
  - i. From here you can upload the PDF to Google Drive, begin emailing it to Jason James, etc.
- 12. Email PDF to Jason James at craie@acm.org
  - a. Subject must say "Jonathan Pilafas CSC122-001 Porfolio X -- FINAL version"

After Step 12, the assignment has been submitted and will be graded by Jason James. You have now completed your assignment.

## \*Information file must look like the following (ex: city\_main.info):

/\*

- Name: Jonathan Pilafas
- Class for which program was written: CSC122-001
- Program: Lab "Hi"==""hi?
- Project Name: Hi\_Equals\_hi\_String
- Project Type: .cpp
- Levels Attempted:
- Given assignment is Level 1.5
- No greater levels attempted
- So this assignment is Level 1.5 + Level 0 = Level 1.5
  - Program Description:

This C++ program is a function that allows a case-insensitive comparison of two strings. This is done without altering the strings at all throughout the duration of the program. In addition, this program does not make any copies of the string that is inputted, rather the program passes the strings by reference to maximize effectiveness/efficiency.

\*/

\*\*Thought-provoking questions file must look like the following (ex: city\_main.tpq):

/\*

1. How do you compare two characters without reference to case? How might you do this without destroying the character variable(s) contents?

~~~~ To compare two characters without reference to its case, you can use a while statement to walk from char to char along each of the strings that are being compared to each other until the program reaches the end or finds a difference in the characters at the two aligned positions. This is an alternative from the .compare() function or any other built-in comparison function that would otherwise be case-sensitive.

2. How can you compare two strings in a case-insensitive way without destroying their contents? (You should NOT change the strings in order to compare them!)

~~~~ To compare two strings in a case-insensitive way without destroying its

contents, I used the following function: short string\_comparison(string first, string second).

We are using a while statement to observe the inputted string character-by-character, -so we need a loop control variable to control the while statement, thus making ?short? the ideal unsigned int type for this program.

- 3. What kind of arguments should your string comparison function take? (Value, reference, constant?)
- ~~~~ The argument that my string comparison function has is passing string 1 and string 2 by reference. This allows the program to refer back to the string inputted instead of copying it (numerous times, potentially) to maximize the program's efficiency.
- 4. How do you get that weird ?return? value for your function? Is it always "-1","0","1"? Or is there a reason it was defined as simply less than "0","0", or greater than "0"?
- ~~~~ For the return variables for my comparison functions, I return 0 if the inputted strings are the same, return -1 if the first string is smaller than the second string, and return +1 if the second string is smaller than the first string.
- 5. How many times will you need to call your function to test it thoroughly? How many times should you have to run the driver to do this testing?
- ~~~~ To test my program sufficiently, it requires at least 3 tests to ensure that it works effectively. Since there are 3 possible results that could ideally be obtained, all of these potential results must be tested to confirm the effectiveness of the program.