

# **CSC 1300 LAB 4 GOLD**

## **ABOUT GOLD & PURPLE LABS**

**Gold** labs are designed to give you more freedom and flexibility over what program you write for your lab assignment. They are best for students who may already have programming experience or for students who want to be more creative.

**Purple** labs are designed to give you an exact program you need to write. They are best suited for students who may be new to programming and/or who like to have exact directions on what to do.

You may either select Gold or Purple lab no matter what your lecture or group is, but do not do both!

You may complete this assignment by yourself, or you may choose to write this program with <u>one</u> partner and practice paired programming. If you do, both students must agree to either Gold or Purple lab, must write both names in the comment block at the top, and must name the zip file with both usernames. Note that you may not share your code with anyone other than the one partner you select.

### **CONCEPTS**

- Relational expressions & logical operators
- While loop for input validation
- Do-While loop
- String Functions
- Character Functions

#### **Create a Game!**



Photo Credit: https://www.quora.com/What-are-some-of-the-best-text-based-games

## **DIRECTIONS**

- Create a LAB4Gold\_yourTTUusername folder and inside that folder, create a source file named lab4.cpp.
- Write a program where you create a text-based **GAME** that follows the rules in the **DO/DON'T** box below.
- Make sure the program compiles with no syntax errors and runs with no logic errors.

DO	DON'T
Do use at least one if-else if-else multi-branch where logical operators are required.	Don't create any functions
	other than the main function.
Do read in at least <b>two integers</b> from the user and for each value read in, you should	Don't create any structs or
validate that the number is in the valid range with a while loop to ensure it is in the valid	classes.
range. You may assume that the user entered in the correct data type, but not the correct	
value in that data type.	
Use one <b>do-while</b> loop in a situation where it makes sense to use this loop (running the	
program again or menu-based program)	
Do use the <b>find</b> and <b>replace</b> functions in the C++ string library.	Don't use vectors.
Do use at least <b>one</b> character testing or character conversion function from the <b><cctype></cctype></b>	Don't use pointers.
library	
Do create a <b>comment block</b> at the top containing the filename, author (you), date, and	
make sure to describe the purpose of your program.	
Do include some <b>comments</b> throughout your code to explain major sections.	
Do use good programming practices and make your output readable (does the user know	
what to do?) as well as your code.	

## **WHAT TO TURN IN**

Compress/zip the Lab4Gold\_yourTTUusername folder and upload it to the ilearn assignment folder named Lab 4.