

CSC 1300 LAB 5 GOLD

Fall 2024, Written by Kelsey Rainey, Last Updated Sept 27, 2024

Learning Objectives

- While/Do-While Loops
- For Loops
- Nested Loops
- Running totals
- Input Files

NO Paired Programming Option

This is an **individual assignment**. As per the syllabus, you may still talk with other students about the assignment, **however**, you are not allowed to share more than a few lines of code with them.

Part 1: Wordle



You've *all* played Wordle before, right? No? NYT anyone? The premise is that you are trying to guess a random 5-letter word. You have six guesses. For each guess, it tells you if a letter is in the word but not the correct position, in the word and in the correct position, or not in the word at all.

You must use at least one of each: for loop, while loop, do-while loop. It is up to you to decide where to use each loop.

You much verify all user input to make sure that it is an expected value.

Remember, **THIS IS AN INDIVIDUAL ASSIGNMENT!**

For this lab, you will:

1. Print the rules of the game
2. Use files to get a random word
 - a. Download the given_words.txt into the same directory as your lab5.cpp
 - b. Include the file stream library `#include<fstream>`
 - c. Create an input file stream object `ifstream fileObjName`
 - d. Open the file `fileObjName.open("filename.txt")`
 - e. Verify the file is open `if (!fileObjName.is_open()) {`
 - f. Create a random number between 1 and the max number of lines in the file (in the given file, it is 70)

- g. Use a for loop to iterate from 0 to the random number
- h. In the for loop, use `getline` to get the word at that line `getline(fileObjName, wordToGuess)`
- i. Close the file after the loop `fileObjName.close()`

Sample Outputs

User input is highlighted in **yellow**.

Sample Output 1

[illegible]

Rules:

You have 6 guesses to guess a 5 letter word with no repeating letters.

The word will have no repeating letters.

For each guess, the word will be printed out again.

If it is a blank (____), the letter is not in the word

If it is the letter with the underline (P), the letter is in the word just not in the correct position

If it is just the letter (P), the letter is in the correct position

GOOD LUCK

Guess 1: irate

_____ R A _____ T _____ E

Guess 2: sound

Guess 3: clasp

 C A

Guess 4: black

_____ A C _____

Guess 5: slack

A C

Guess 6: brace

R A C E

Too bad :(The word was trace

Would you like to play again? (y or n) y

_____S_____

_____ A _____

_____ L A S _____

F L A S H

Great guessing :)

S H O U T

Great guessing :)

B O W N

B L O W N

Great guessing :)

The total times you won was 3

The image is a technical drawing of a mechanical part, likely a bracket or support, showing multiple views (front, top, side, and section views) with dimensions and tolerances. The drawing is rendered in black lines on a white background.

Key Features and Dimensions:

- Overall Dimensions:** The part has a total width of 100 mm and a total height of 100 mm.
- Top View:** Shows a rectangular base with a central slot. The slot is 40 mm wide and 20 mm deep. The base is 100 mm wide and 100 mm high.
- Front View:** Shows the side profile of the part. It has a total height of 100 mm. The base is 100 mm wide. There is a vertical slot 40 mm wide and 20 mm deep. The top surface is 100 mm wide.
- Side View:** Shows the side profile of the part. It has a total height of 100 mm. The base is 100 mm wide. There is a vertical slot 40 mm wide and 20 mm deep. The top surface is 100 mm wide.
- Section Views:** The drawing includes several section views (A-A, B-B, C-C, D-D, E-E, F-F, G-G, H-H, I-I, J-J, K-K, L-L, M-M, N-N, O-O, P-P, Q-Q, R-R, S-S, T-T, U-U, V-V, W-W, X-X, Y-Y, Z-Z) showing internal features and tolerances.
- Tolerances:** Various tolerances are specified throughout the drawing, such as ± 0.1 , ± 0.2 , ± 0.3 , ± 0.4 , ± 0.5 , ± 0.6 , ± 0.7 , ± 0.8 , ± 0.9 , ± 1.0 , ± 1.1 , ± 1.2 , ± 1.3 , ± 1.4 , ± 1.5 , ± 1.6 , ± 1.7 , ± 1.8 , ± 1.9 , ± 2.0 , ± 2.1 , ± 2.2 , ± 2.3 , ± 2.4 , ± 2.5 , ± 2.6 , ± 2.7 , ± 2.8 , ± 2.9 , ± 3.0 , ± 3.1 , ± 3.2 , ± 3.3 , ± 3.4 , ± 3.5 , ± 3.6 , ± 3.7 , ± 3.8 , ± 3.9 , ± 4.0 , ± 4.1 , ± 4.2 , ± 4.3 , ± 4.4 , ± 4.5 , ± 4.6 , ± 4.7 , ± 4.8 , ± 4.9 , ± 5.0 , ± 5.1 , ± 5.2 , ± 5.3 , ± 5.4 , ± 5.5 , ± 5.6 , ± 5.7 , ± 5.8 , ± 5.9 , ± 6.0 , ± 6.1 , ± 6.2 , ± 6.3 , ± 6.4 , ± 6.5 , ± 6.6 , ± 6.7 , ± 6.8 , ± 6.9 , ± 7.0 , ± 7.1 , ± 7.2 , ± 7.3 , ± 7.4 , ± 7.5 , ± 7.6 , ± 7.7 , ± 7.8 , ± 7.9 , ± 8.0 , ± 8.1 , ± 8.2 , ± 8.3 , ± 8.4 , ± 8.5 , ± 8.6 , ± 8.7 , ± 8.8 , ± 8.9 , ± 9.0 , ± 9.1 , ± 9.2 , ± 9.3 , ± 9.4 , ± 9.5 , ± 9.6 , ± 9.7 , ± 9.8 , ± 9.9 , ± 10.0 .

Rules:

You have 6 guesses to guess a 5 letter word with no repeating letters.

The word will have no repeating letters.

For each guess, the word will be printed out again.

If it is a blank (____), the letter is not in the word

If it is the letter with the underline (_P_), the letter is in the word just not in the correct position

If it is just the letter (P), the letter is in the correct position

GOOD LUCK

Guess 1: **sound**

S _ _ _ _

Guess 2: **stale**

S T A L E

Guess 3: **slate**

S L A T E

The word was: slate

Great guessing :)

Would you like to play again? (y or n) **n**

The total games you played was 1

The average guesses per game was 3

The total times you won was 1

Part 2: Fill Out the Lab Report

You will fill out this lab report for every lab and it is part of your grade. To get credit, you must upload a screenshot of the confirmation page to this lab assignment. Name your screenshot **lab5ReportProof**.

Lab Report Link: https://tntech.co1.qualtrics.com/jfe/form/SV_d6BGc6kzQdSvBmS

What to Turn In

Create a zip file named **username_lab5** containing the following .cpp files and upload it to ilearn. Replace labPartner1username with your TTU username. Example: **acrockett43_lab5.zip**

- **lab5.cpp**
- **lab5ReportProof**

Remember to download and check your .zip file to make sure that it includes your .cpp and lab report proof.