

CSC 1300 LAB 2

Spring 2025, Kelsey Rainey

Concepts

- Data types, variable definitions
- Arithmetic expressions
- Input
- Output
- Debugging

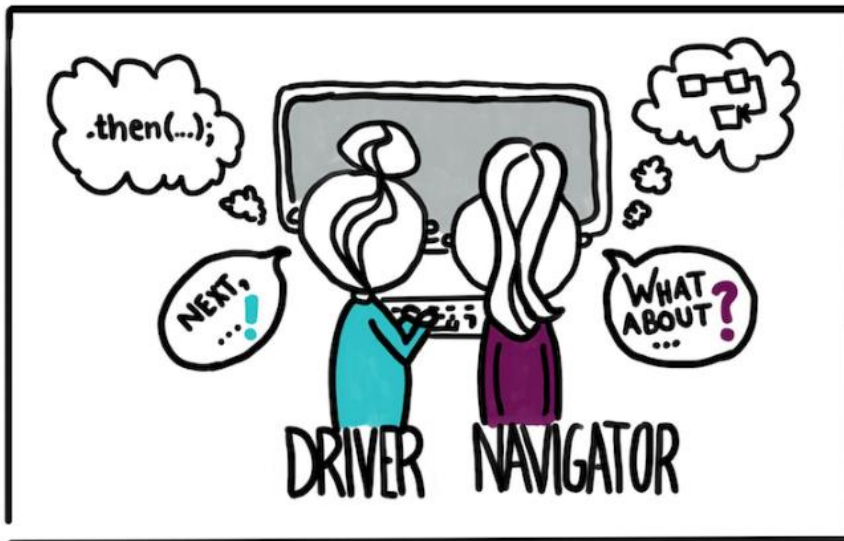
Paired Programming Assignment

Your Partner

Your lab instructor has assigned you a lab partner for this lab (or have allowed you to choose your partner).

You are required to complete this lab with your lab partner using paired programming techniques.

Your first step is to **exchange preferred contact information** just in case you are unable to complete the lab during lab and need to meet outside of lab class to finish.



Submission in iLearn

You will both upload the same exact zip file to your Lab 2 assignment in iLearn.

Each source file should have both of your names in the comment block at the top.

Both students will receive the same feedback and grade.

How to Pair Program

One of you can start writing (or debugging) the initial code (**DRIVER**) while the other reviews and suggests improvements (**NAVIGATOR**).

Take turns regularly (every 10 to 15 minutes) to ensure both of you are actively involved.

Part 1: Secret Agent



Part 1 Directions

You have just begun working at the MTF (Mallard Task Force). Before you can take your first mission, you must generate your secret agent code name.

1. Download the `lab2a.cpp` document from iLearn.
2. Follow the steps found in the `Lab 2 Debugging Document`.

Part 1 Sample Output

User input is highlighted in yellow.

```
Welcome to the MTF (Mallard Task Force).
In order for your identity to remain secret, we need to come up with your agent name

What is the first letter of your first name? K
What is your birthday in the format MMDD (ex June 08 is 0608): 0909
What word are you thinking right now: Gobsmacked

Your new spy name is now Gobsmacked 1205
```

```
Welcome to the MTF (Mallard Task Force).
In order for your identity to remain secret, we need to come up with your agent name

What is the first letter of your first name? A
What is your birthday in the format MMDD (ex June 08 is 0608): 0131
What word are you thinking right now: Bunny

Your new spy name is now Bunny 205
```

Part 2: Crush Compatibility



Part 2 Directions

Several ducks have been approaching you believing you to be Supreme Being. They keep asking if they are compatible with crush. Since your ego can't take the hit of admitting you are not Supreme Being, you decide to create a crush compatibility tester to help the ducks.

1. Name your program **lab2b.cpp**.
2. Your program should take in the full name of both ducks, their age, and the first letter of their favorite color. You will use these inputs to create an equation that outputs a double between 0.00 and 100.00. **You are free to write the equation how you want but it must use the ages and letters and output a double.**
3. Document your coding process in the **Lab 2 Debugging Document**. If your equation is not working as you expect when you run it, that is a logic error that should be documented.

Part 2 Sample Output

User input is highlighted in **yellow**.

```
***WELCOME TO THE CRUSH COMPATIBILITY TESTER***

Enter your name: Brenda
Enter your age: 21
What is the first letter of your favorite color? B
Enter your crush's name: Gary
Enter your crush's age: 23
What is the first letter of your crush's favorite color? R
Brenda and Gary are 83.80 compatible.

***WELCOME TO THE CRUSH COMPATIBILITY TESTER***

Enter your name: Lab Princess Wes
Enter your age: 20
What is the first letter of your favorite color? Y
Enter your crush's name: Kaleigh Hooper
Enter your crush's age: 22
What is the first letter of your crush's favorite color? G
Lab Princess Wes and Kaleigh Hooper are 41.25 compatible.
```

Part 3: 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 **lab2ReportProof**.

Lab Report Link: https://tntech.co1.qualtrics.com/jfe/form/SV_8CgQBOeBBefzeCO

What to Turn In

Create a zip file named **labPartner1username_labPartner2username_lab2** containing the following .cpp files and upload it to ilearn. Replace labPartner1username with one lab partner's TTU username and replace labPartner2username with the other lab partner's TTU username. Example: **jdean42_acrockett43_lab2.zip**

- lab2a.cpp
- lab2b.cpp
- Lab 2 Debugging Document
- lab2ReportProof

Remember, both lab partners should upload this zip file to their ilearn assignment, and your submissions should be **exactly** the same.