## **Paired Programming Procedure**

- For the coding questions that involve pair programming, two people will be working with each other. They will have to find a way to communicate and talk with each other (the most convenient way is to use Zoom) as well as sharing screens of their code editors or using the LiveShare extension in VSCode.
- 2. One person will be the driver and the other person will be the navigator. The driver is the person who will write the code for the coding question while the navigator is the one who will review the code and plan out what code the driver should write.

## The roles should be swapped after each coding question.

- 3. Before beginning to write any code, both the driver and the navigator should think of an approach they are going to take to solve the coding question. For the assignment, they will **both** need to write pseudo code to explain their approach.
- 4. Once they are ready to implement the solution, the navigator should lead and tell the driver what code to write. The navigator should make sure that the driver is writing code that they agree upon, while trying his/her best **not to tell the driver the exact syntax** that the driver should use to write the code.
  - For example, instead of telling the driver: "write a for loop from i=0 to the array length," the navigator should say something like: "iterate through the array"
- 5. Once the implementation is completed, both the driver and the navigator should check that the code will run without errors and pass the test cases.
- 6. Provide feedback on your partner's performance based on the roles they were given for each coding question in their submission. Refer to the instructions on the next page.

For your assignment submission, include a file that contains the following (see the template provided):

- 1. Pseudo code for each solution (both the driver and the navigator needs to submit this).
- 2. The solution for the coding question (only if you were the driver)
- 3. An analysis of the time and space complexities for the solution.
- 4. Feedback on your partner's performance (include this as comments), following this structure:
  - a. What did they do well on (as driver, as navigator)?
  - b. What can they improve on (as driver, as navigator)?
  - c. How was the overall experience?