

# Introduction to Java

In this course, you will work in teams of 3–4 students to learn new concepts. This activity will introduce you to the process. We'll also look at how to print (display) messages in Java.

Manager:

Recorder:

Presenter:

Reflector:

## Content Learning Objectives

*After completing this activity, students should be able to:*

- Describe the responsibility of each team role.
- Summarize the benefits of working as a team.
- Identify components of a "hello world" program.

## Process Skill Goals

*During the activity, students should make progress toward:*

- Leveraging prior knowledge and experience of other students. (Teamwork)



## Model 1 Team Roles

Decide who will be what role for today; we will rotate the roles each week. If you have only three people, one should have two roles. If you have five people, two may share the same role.

Manager:
Presenter:
Recorder:
Reflector:

### Questions (15 min)

**Start time:**

1. What is the difference between **bold** and *italics* on the role cards?
2. Manager: invite each person to explain their role to the team. Recorder: take notes of the discussion by writing down key phrases on the *Recorder's Report*.
3. What responsibilities do two or more roles have in common?
4. For each role, give an example of how someone observing your team would know that a person is not doing their job well.
  - Manager:
  - Presenter:
  - Recorder:
  - Reflector:

## Model 2 Group vs Team

Throughout the course, you will need to examine and process information, ask and answer questions, construct your own understanding, and develop new problem-solving skills.

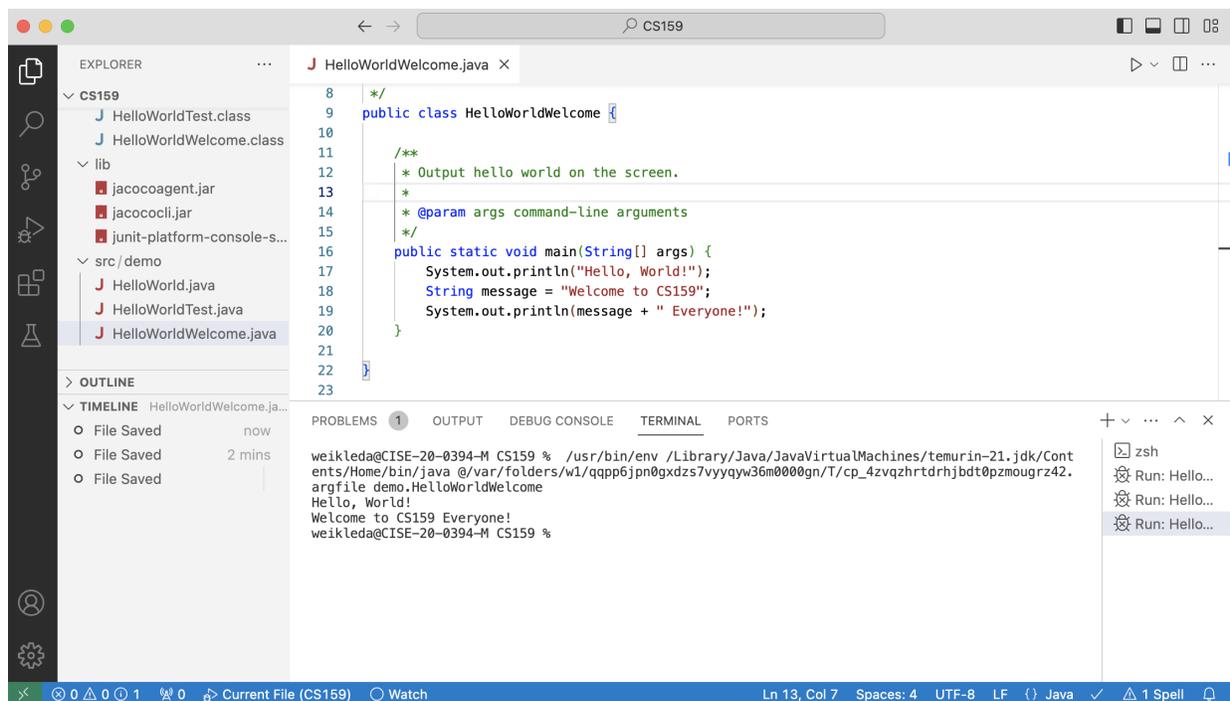


### Questions (10 min)

**Start time:**

5. What are some advantages to working in groups/teams?
6. What are some disadvantages to working in groups/teams?
7. Based on the images above, what is the difference between a group and a team? Come up with a precise answer.
8. How can working as a team help you accomplish the tasks described above? Give at least two specific examples.

## Model 3 Hello, World!



The screenshot shows an IDE window with the following content:

```
8  */
9  public class HelloWorldWelcome {
10
11     /**
12      * Output hello world on the screen.
13      */
14     * @param args command-line arguments
15     */
16     public static void main(String[] args) {
17         System.out.println("Hello, World!");
18         String message = "Welcome to CS159";
19         System.out.println(message + " Everyone!");
20     }
21
22
23
```

The terminal output shows the execution of the program:

```
weikleda@CISE-20-0394-M CS159 % /usr/bin/env /Library/Java/JavaVirtualMachines/temurin-21.jdk/Contents/Home/bin/java @/var/folders/w1/qpp6jpn0gxdzs7vyyqyw36m0000gn/T/cp_4zvqzhrtdrhj bdt0pzmougrz42.
argfile demo.HelloWorldWelcome
Hello, World!
Welcome to CS159 Everyone!
weikleda@CISE-20-0394-M CS159 %
```

### Questions (15 min)

Start time:

9. What is the name of the class? What is the name of the file? What directory is it in?
10. How many lines of code is the above program? How many statements does it have?
11. What is the purpose of lines 11–15? What is the purpose of lines 10 and 21?
12. Describe in your own words what `System.out.println` does. Be very specific.

13. Describe in your own words what the + (plus) operator does in line 19. What would you expect if the operands were numbers?

14. Write a single statement in Java that, if added after line 19, would print out the word Good-bye on its own line. Ask the instructor or TA to check your answer.

15. This program is titled "Hello World". Do you see an issue with that title? What might be a better title?