Activity 1: Introduction

Each Monday, you will work in teams of 3–4 students to learn key concepts. This activity will help you get started with that process. We'll also take a first look at computer hardware and Java code.

Model 1 Team Roles

Decide who will be what role for today. We will rotate roles throughout the course.

Manager: Helen Hu
Presenter: Clif Kussmaul
Recorder: Chris Mayfield
Reflector: Aman Yadav

If you have only three people, one may serve as both manager and presenter. If you have five team members, then assign two people to recorder or reflector.

Questions (12 min)

1. What is the difference between **bold** and *italics* on the role cards?

The bold points describe what the responsibilities are. Examples of what that person would say are in italics.

2. Manager: invite each person to explain their role to the team. Recorder: make sure all team members take notes by writing down key phrases next to the table above.

3. What responsibilities do two or more roles have in common?

Both the presenter and the recorder help the team reach consensus. The manager and reflector both monitor how the team is working.

4. For each role, give an example of how someone observing your group would know that a person is <u>not</u> doing their job well.

- Manager: The team is constantly getting behind.
- Presenter: The student doesn't know what to say.
- Recorder: Some team members aren't taking good notes.
- Reflector: The student never comments on team dynamics.

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 (8 min)

5. What are some advantages to working in groups?

You get to know other people and make new friends. Different people have different backgrounds and skills. The responsibility is shared.

6. What are some disadvantages to working in groups?

Some group members may decide not to contribute. One or two students may be absent. People may not always get along with each other.

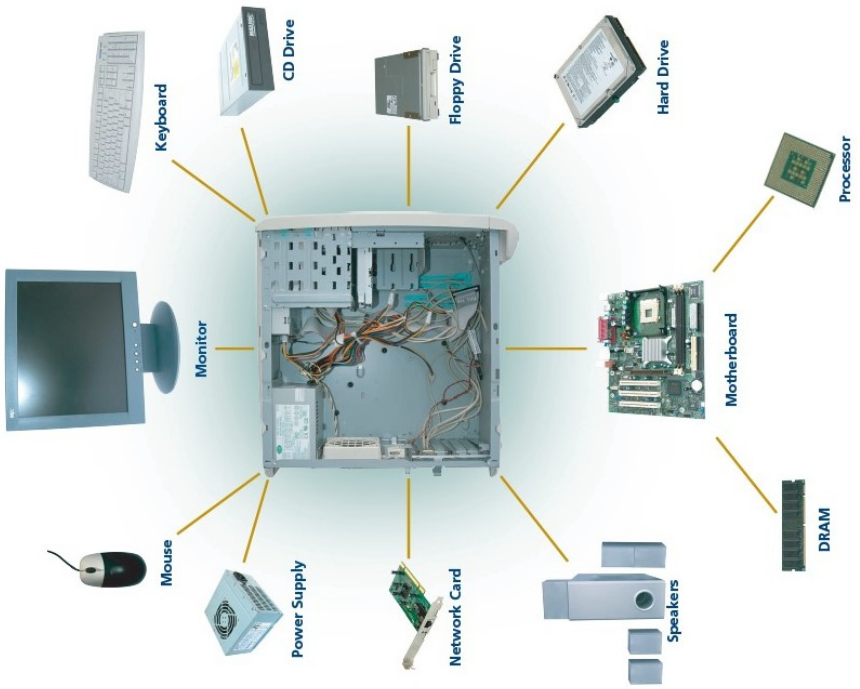
7. What is the difference between a group and a team? Come up with a precise answer.

A group is students who just sit by each other and turn in the same assignment. A team actually works together toward a common goal, drawing on each other's strengths.

8. How can working as a team help you accomplish the tasks described in the model? Give at least two specific examples.

Working as a team makes it easier to examine and process information, because different people have different perspectives. We can also develop new problem-solving skills by observing how each other approaches the problems.

Model 3 Computer Hardware

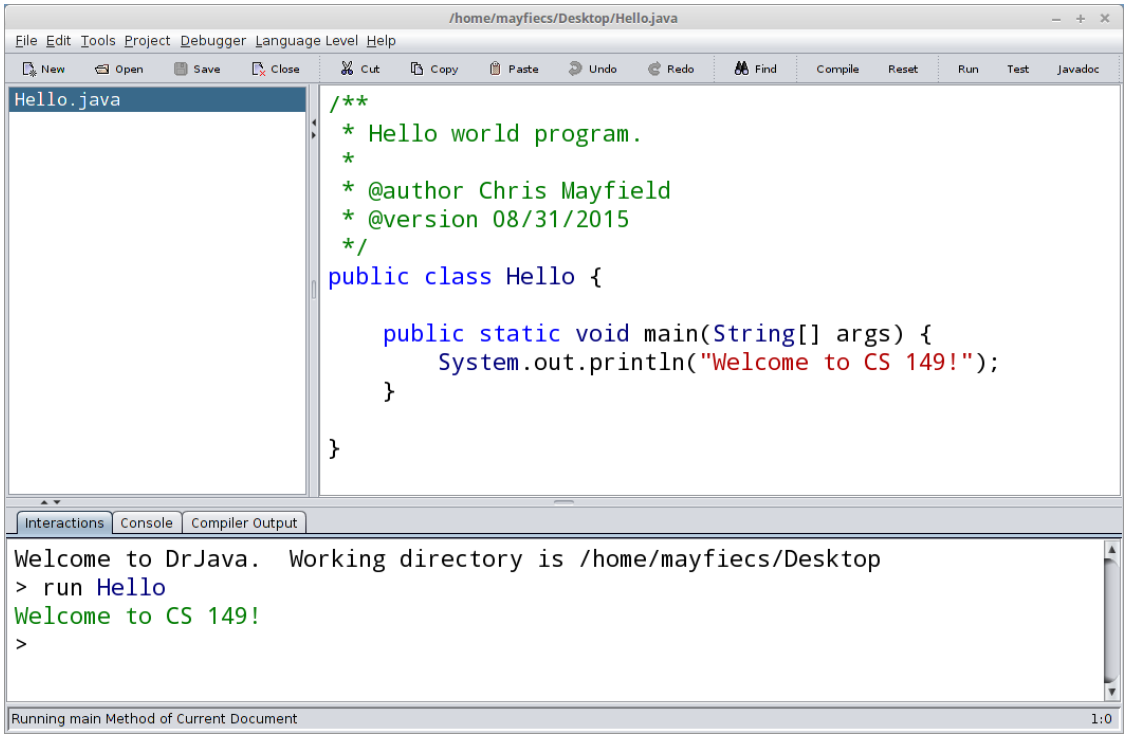


Questions (10 min)

9. For each category, list examples of computer hardware and human anatomy. (Keep it clean.)

	Computer	Human
Input	keyboard, mouse, camera, mic	eyes, ears, mouth, nose
Output	monitor, speakers, printer	mouth, muscles, skin
Processing	CPU, network card, motherboard	brain, heart, stomach
Storage	RAM, disk, flash	fat cells, brain, bones

Model 4 Hello, World!



Questions (10 min)

10. What is the name of the class? What is the name of the file? What directory is it in?

Class name: `Hello` File name: `Hello.java` Directory: `/home/mayfiecs/Desktop`

11. How many lines of code is the above program? How many statements does it have?

The source file has 13 lines. There is only one statement (the `println`).

12. What is the purpose of the first six lines? What is the purpose of the two blank lines?

The first six lines describe what the program does and who wrote it. The last six lines define the `Hello` class. When you run `Hello`, it prints a welcome message.

13. Describe in your own words what `System.out.println` means. Be very specific.

The `println` method displays a message on the screen, followed by a newline character.