(20 pts) Approx. 2 days

NOTE: Our IDE of choice – BlueJ – is already installed on all the computers in the lab. Please do not download and install a second copy.

Java begins here! In the first part of this introductory Java unit, we'll get to look at the basic building blocks of a Java program and of our chosen IDE: BlueJ. An IDE is an "Integrated Development Environment" that lets us write programs, compile programs, debug them when they don't work, and actually run them all from within the same application. IDEs make a programmer's life much simpler. While it's possible to write programs in a simple text editor like Notepad, IDEAs give us other tools to make the job of programming easier.   To work through this introduction to Java, just follow the steps below!

1. Start by watching the three introductory videos on our website. These videos present the ideas of Java and also overview the BlueJ IDE. Take a full page of notes on the ideas presented in these videos.
2. Open BlueJ for yourself and create a new project called "Unit 1". All of your Unit 1 programs for each task should be saved within this one project to help keep things organized.
3. Create a new class called HelloWorld. Follow the information from the videos to create the HelloWorld program that simply prints the words "Hello World!" to the terminal. Your computer is now sentient!
4. Now, complete the first 5 Java Tasks below that all require printing text on the screen!
    a. JAVA TASK 1: Write a program that displays the numbers 1 to 8 on the same line using exactly ONE System.out.println statement with each number separated by a single space.
    b. JAVA TASK 2: Write a program that displays the numbers 1 to 8 on the same line using exactly FOUR System.out.print statements with each number separated by a single space.
    c. JAVA TASK 3: Write a program that displays the numbers 1 to 8 on the same line using exactly ONE System.out.printf statement with each number separated by a single space.
    d. JAVA TASK 4: Write an application that displays a box, an oval, an arrow, and a diamond using asterisks as shown on the right:
    e. JAVA TASK 5: Write a program that prints a 10x10 grid in the shape of a (solvable) maze. The maze should use asterisks (*) to create its walls.

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*      *       *   *       *****        *   *
*      *       *   *         *         *     *
*      *       *   *         *        *       *
*      *        * *          *         *     *
********        ***          *          *   *
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Part 1: Tasks	5 points	4-3 points	2-1-0 points
🔲 Basic Java & BlueJ Notes	+ Watch all presentations + You took a full page of notes on how basic Java programs are made + Your notes include details about BlueJ specifically	- Less than a full page of Java notes - No notes on using BlueJ specifically	- Very brief or no notes in your notebook
⊕ Hello World!	+ You completed the "Hello World" program	- You never got the program working fully	- You did not attempt the program
⊕ Java Tasks 1-5	+ You completed all 5 Java Tasks from this section	- You did not complete all 5 tasks	- You did not complete any tasks
☆ Checkoff from Benshoof	+ Mr. Benshoof got to see your Java programs run successfully	N/A	N/A