Unit 1: Primitive Types

Topic 2: Variables & Data Types

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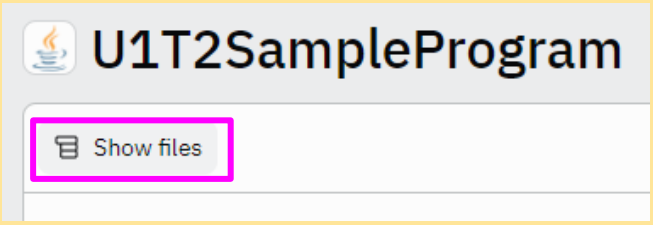
Name:	

Review details on slides 25 through 32 for what you need to know about variables and data types in Java, then **X** here when done! →	

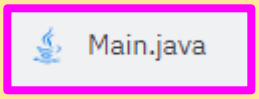
Sample Program

A. Open up this sample Java program that uses variables and a constant of different data types and prints them out as part of sentences using string concatenation.

To see the code, click on "**Show Files**":



And then on Main.java:



Pro Tip! You will also notice a **Main.class** file -- this is actually the *compiled* version of Main.java that Java *actually* executes! Click on it and you will notice that you can't read it because it's machine-readable **bytecode**. Humans type the **.java** files, which get *compiled* to bytecode **.class** files.

Click on  to make the Main.java file full screen.

Click on Run to run the program: 

Study what it does and how the code is written! Pay careful attention to how variables are used, how the code is structured, and the use of comments. You will be building a similar program next

Open up U1T2 Lab in Replit.

Write a brand new Java program in which multiple variables are declared and initialized and then prints them to the console as part of full sentences using string concatenation. *Include the use of a constant as well!* Also, use at least one single line comment (with `//`) and at least one multi-line comment (with `/* */`). See Kaufman's sample program shared above for an example.

Lastly, you will notice on **line 23** the use of a math operation (multiplication)! We haven't discussed these yet, but you can figure them out . In your program, think of a way to use one of the *other* basic math operations -- add, subtract, or divide -- and use it!

You should create an entirely different scenario than the one in the example!

Program Checklist:

X	
	Use several different variables, including *at least one of each* of the following data types: `int, double, boolean, String`
	Declare and initialize all variables and constants correctly.
	Use proper **`camelCaseNaming`** for non-constant variables (example: `playerName`)
	Use a constant in a meaningful way (conversions, math constants, etc.) and use proper conventions. Don't forget that *constants* have **`final`** in front and are all caps with underscores, like: `GRAMS_PER_POUND`
	Use good code style conventions (indentations, spacing between sections, etc.)
	Uses string concatenation to combine strings with variables, strings, and/or other non-string values.
	Includes a math operation other than multiplication (add, subtract, or divide).
	Includes print and/or println statements to produce meaningful output.
	Use at least one single line comment `(//)` *and* at least one multi-line comment `(/* */)`

When you are finished, **copy/paste** your full program code below; use the **`Courier New`** font.

Insert a **screenshot** of the printed output produced by your program:

Partner Check-In! Show your code to your partner; have your partner review your code to ensure your program meets the requirements and give you one piece of feedback or suggestion. **When you review your partner's program code, do the same thing:** Does it meet the requirements? What is one piece of feedback or suggestion you would make?	**What is your partner's name?** **What piece of feedback did you receive?**

Done!

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Turn in