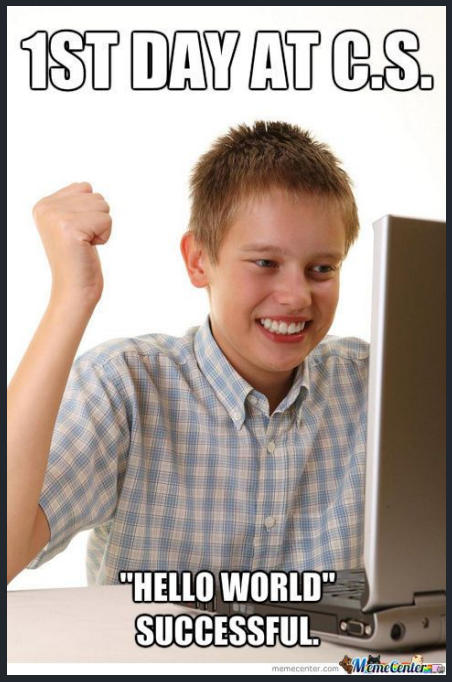
Topic: Hello, World!

Learning Objective:

IWBAT code print statements in Java by using CS50 IDE.



Standard: 7-8.CT.7

7-8.CT.7 Design or remix a program that uses a variable to maintain the current value of a key piece of information.

warm up

What are some ways people greet each other?

Have students answer this question in their notebooks.
Share out once timer ends.
They may dance if finished early.
Segway into how computer programs can greet their users.

Java

For this class, we will be using a programming language known as Java. It is one of the most popular languages in the world. The programs on the right were all built on Java.

Source: https://tekkieuni.com/blog/coding-vocabulary/

Hello, World!

"Hello, World!" is usually one of the most basic and simplest programs to code. It prints out the phrase "Hello, World!".

We will learn how to do this in Java.

CS50 IDE

For this class, we will be using the CS50 IDE.

An integrated development environment (IDE) is software for building applications that combines common developer tools into a single graphical user interface (GUI).

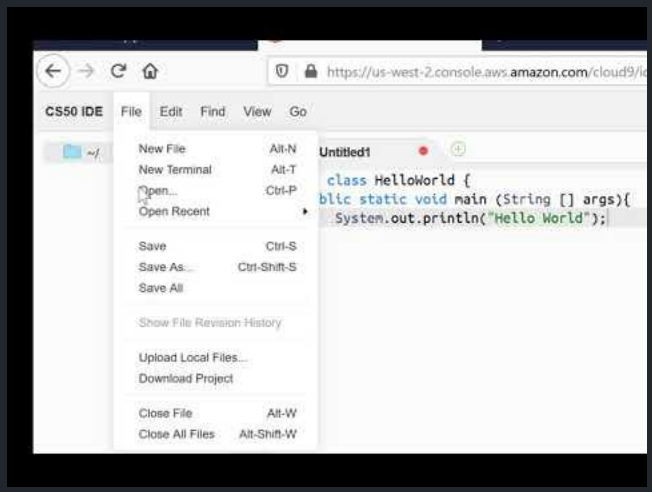
Please go to this website: ide.cs50.io

Follow the instructions to create a GitHub account.

Source: https://www.redhat.com/en/topics/middleware/what-is-ide

Live Coding

Please follow along this video and type the code on your device.



Live code “Hello, World!” for the students.

Variable

In coding, a variable is a value that changes depending on the data and information the specific program receives.

A variable is a value that can be modified as many times as necessary, depending on the data users and systems provide the specific app, program, game or software.

For today, we will be using a Java variable known as String. String variables store texts and are surrounded by double quotes. (“ “)

Source: https://tekkieuni.com/blog/coding-vocabulary/

Live Coding

Please follow along with me as I use the String variable in Java.

Live code using name as a String variable

MAD LIBS

Directions for class:

1. Decide who goes first. (Person who's younger will go first)
2. Choose a Mad Lib from here: https://www.woojr.com/mad-libs-worksheets/
3. Set each blank as a variable.
    a. Ex. My favorite color is _____. (color)
        i. String color = "blue" ← this will be supplied by your partner
    b. Use each type only once.
        i. There should not be two *color* String variables.
4. Type the Mad Libs in the same format as the one you chose.
5. Print out Mad Lib with your partner's chosen words and read out loud to partner.
6. Fix any errors with code.
7. Swap roles and repeat.

Give students 20 minutes. Have them submit when both are completed.

wrap up

- Using BFD (Binary feedback device), use your thumbs to show understanding of today's topic.
- What problems/errors did you or your partner encounter?
  - How did you manage to solve this issue?
- What else do you think we can do with this code?

Have a discussion about the provided questions