Teacher: Benson Leung **Lesson Plan 1**
Unit: Computational Thinking **Class: 7th / 8th Grade** **Date:**

Essential Question: [Danielson 1c] How can we print statements in Java?

Standards: [Danielson 1c] **7-8.CT.7** Design or remix a program that uses a variable to maintain the current value of a key piece of information.

Materials: [Danielson 1d, 1e, 3c] notebook, pencil, computers

Learning Objective: [Danielson 1a, 1c]
SWBAT code print statements in Java by using CS50 IDE.

Academic Vocabulary: [Danielson 3a]
Variable, String, IDE, Java, live coding

Do Now/Warm-up Activity (6 minutes): [Danielson 3d]
"**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.

Mini Lesson – Step by Step Procedures (15 minutes): [Danielson 1a , 3a]
Read slides 3-5 to students.
Have students go to: **ide.cs50.io** and setup an account.
Live code "Hello, World!" in Java.
Define **variable** on slide 7.
Live code how to use name as a variable and print it out.

Assessments [Danielson 1f, 3b, 3d]
Checks for understanding through questioning. Final code for Mad Libs. BFD (Binary feedback device)

Work Period *(They do)* (20 minutes): [Danielson 1e, 2b, 2c]

Students will work in pairs and follow the instructions on slide 9 on how to create Mad Libs.

Differentiation: [Danielson 1b, 1c, 3e]

ELLs: translations available with technology and on slides.
SPED: N/A
Small Groups: Created based on misconceptions if needed

Summary: [Danielson 3c, 3d, 4a] (5 minutes)

- 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?

Misconceptions: [Danielson 3d]
1 – Does not know where to start
2 – Unable to create an account
3 – "Hello, World!" not printing
4 – Missing variables
5 – Missing quotes for String
6 – Forgetting ;
7 – Missing/Adding {