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YOUR BREAKOUT MISSION (30min):

SCENARIO: It is the first time you are introducing a particular debugging technique to your students.

GOAL: *Gain deeper/wider awareness* of best time/setting in which to introduce a **debugging technique**, as well as how to best set up students to appreciate its worth.

Codify this understanding into a document for future use.

TASK: *As a team*, pick an assignment from Data Structures or Programming, and **design an activity** around that assignment to lead students through 1 or more debugging technique(s).

near-term DELIVERABLE: **Demo** (guided tour via screenshare) of your activity **plan**.

end-of-day DELIVERABLE: **08_debug** (PDF or text file, appropriate extension)

RESOURCES:

<https://books.trinket.io/thinkjava/appendix-c.html>

https://cscircles.cemc.uwaterloo.ca/java_visualize/

<http://rubber-duck-debugging.org/>

(more where these came from:

<https://github.com/hunter-teacher-cert/cs-ed-cohort-3-summer-2022>)

Slacker TASK: stay tuned for check-ins

The lesson we are using is **METHODS AND ARRAYS**

Estimated lesson time: **1 week**

Goal: SWBAT create a print out of each method in the main class. These are questions that we came up with that would help guide students' thinking in terms of debugging code.

- 1) If we wanted to print out this method, what will the print out look like?
- 2) What do you need the method to do?
- 3) What does it actually do?
- 4) Do any of your methods return something? If they do, what is it?
- 5) What parameters have to be passed into the method from the main?
- 6) What are the issues you've found?
- 7) Have you encountered these types of problems before?

Introduction discussion would be about the kinds of errors that occur in coding, not just in Java, but in **any** programming language.

The handout that is with this document would be handed out during the first few days once the subject is introduced to challenge students to see if they could find any possible errors that would prevent this code