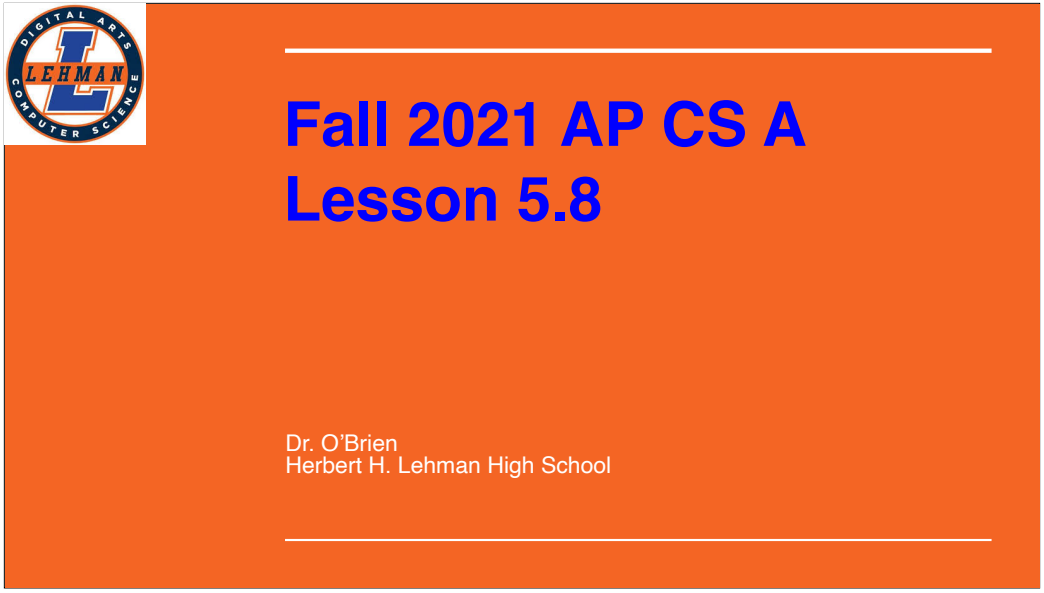
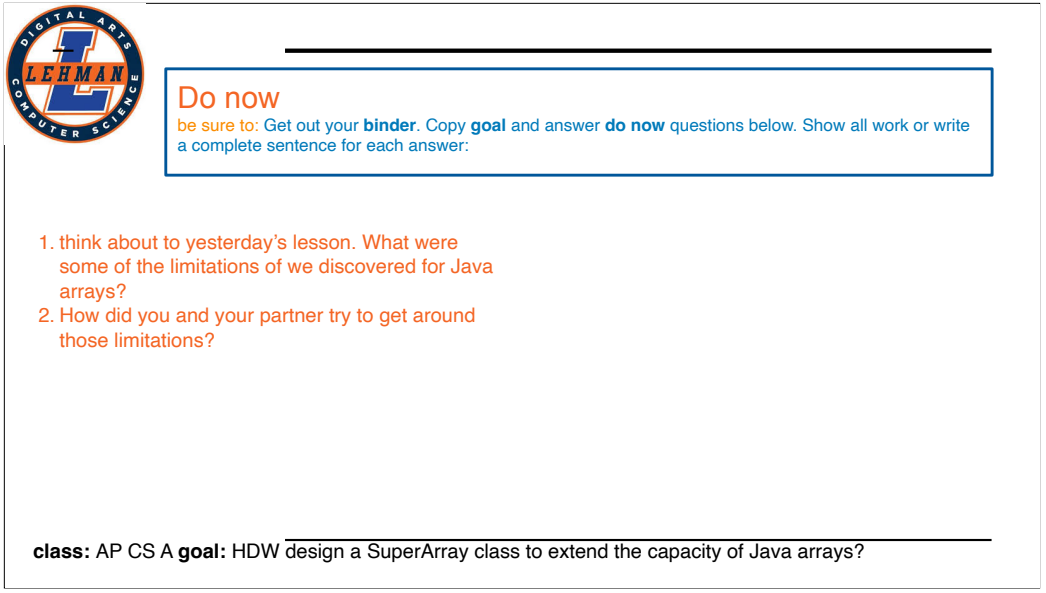


STANDARDS REFERENCED:

CSTA 11-12th grade standards: 3B-AP-12: Compare and contrast fundamental data structures and their uses.

NY State: 9-12.CT.7
Design or remix a program that
utilizes a data structure to maintain
changes to related pieces of data.

9-12.CT.5
Modify a function or procedure in a program to perform its computation in a different way over the same inputs, while preserving the result of the overall program.



1. Arrays are fixed in length. Less flexible than lists. in Python.

framing

- **what:** design a SuperArray class to extend the capacity of Java arrays
- **why:** We want to make our arrays easier to use!!
- **where to:** Review, then test.

class: AP CS A **goal:** HDW design a SuperArray class to extend the capacity of Java arrays?

Activity

Today, you'll work with your partner to implement a wrapper class called `SuperArray`. This array should extend the `Array` class by doing the following:

1. get/set by index
2. get length
3. be able to add more capacity (automatically if necessary)

On CodeHS, in the SuperArray exercise (under In class work), you'll find two files. `SuperArray.java` contains a blueprint for what you need to do. `SuperArrayDriver.java` will be used to test the functionality of SuperArray.

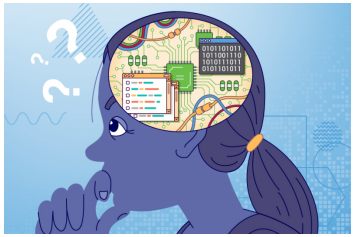
Make sure to diagram your ideas on paper before you store coding!

class: AP CS A **goal:** HDW design a SuperArray class to extend the capacity of Java arrays?

Reflection: Thinking about thinking

be sure to: Answer each question below with a complete sentence.

1. What did you find most challenging about this activity?
2. How is your superarray different from the standard array?
3. Why is encapsulation (review vocab below) important for building your SuperArray class?



Encapsulation
The process of hiding implementation details in a program.

class: AP CS A **goal:** HDW design a SuperArray class to extend the capacity of Java arrays?