

# CSE 121 Lesson 14:

## Arrays

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TAs:	Andy	Anju	Archit	Arkita	Autumn	Christian
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	Jonus	Julia	Luke	Maria	Mia	Ritesh
	Shayna	Simon	Trey	Vidhi	Vivian	Gumball?

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Today's playlist:  
[CSE 121 lecture beats 24sp](#)

# Announcements, Reminders

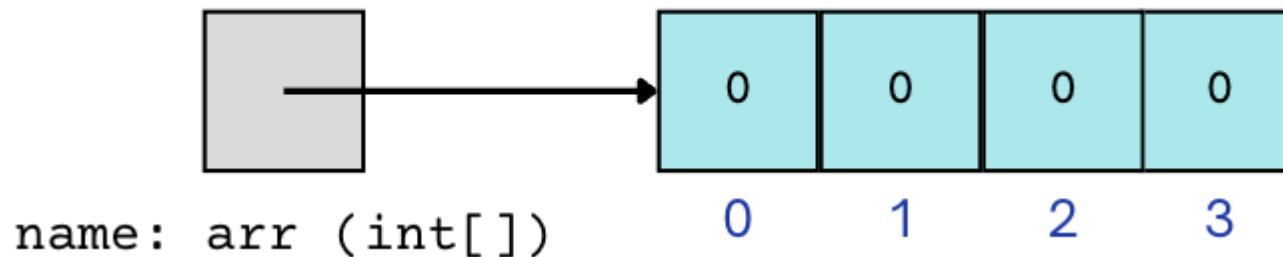
- Creative Project 3 (C3) releasing later tonight; due May 21<sup>st</sup>
- Resubmission Cycle 4 (R4) due tomorrow
  - Eligible: **C1 (last chance)**, P1, C2
- Quiz 2 on Thursday, May 23<sup>rd</sup>
  - Covers everything up to (and including) today's material!
  - Stay tuned for extra practice materials (e.g. practice quizzes)
  - Quiz 1 grades should be out by the weekend!
- Will send an update tonight re: megasection

# (PCM) Arrays

- Elements (must all be the same type)
- Indices (starting at 0)
- Must decide size when created!
- `arr.length` to get arr's length
- `Arrays.toString(arr)` to get a nice `String` version

`int[]`   `arr`   =   `new int[4];`  
type                    name                    array creation code

```
int[] arr = new int[4];
```



# (PCM) Array Traversal Pattern

```
for (int i = 0; i < arr.length; i++) {  
    // do something with arr[i]  
}
```

# Poll in with your answer!



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How can we get the last element of an array `arr`?

- A. `arr[arr.length()]`
- B. `arr[length()]`
- C. `arr[arr.length]`
- D. `arr[arr.length() - 1]`
- E. `arr[arr.length - 1]`

# Poll in with your answer!



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What would the array `a` store at the end of this `arrayMystery` method if `{-20, 20, 26, 32, 50, 3}` was passed in?

```
public static void arrayMystery(int[] a) {  
    for (int i = a.length - 1; i >= 1; i--) {  
        if (a[i] > a[i - 1] + 10) {  
            a[i - 1] = a[i - 1] + 5;  
        }  
    }  
}
```

- A. `{-20, 20, 26, 32, 50, 3}`
- B. `{-15, 25, 31, 37, 55, 8}`
- C. `{-15, 25, 31, 37, 50, 3}`
- D. `{-15, 20, 26, 37, 50, 3}`