CSE 121 Lesson 14: Arrays

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Today's playlist: CSE 121 lecture beats 24sp
Announcements, Reminders

• Creative Project 3 (C3) releasing later tonight; due May 21\textsuperscript{st}

• Resubmission Cycle 4 (R4) due tomorrow
  • Eligible: \textbf{C1 (last chance)}, P1, C2

• Quiz 2 on Thursday, May 23\textsuperscript{rd}
  • 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
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

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

```
| 0 | 0 | 0 | 0 |
```

name: `arr` (int[])
(PCM) Array Traversal Pattern

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

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

```java
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}`