CSE 121 – Lesson 6

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Music: 121 23sp Lecture Vibes 🌸

TAs:

Jasmine    Atharva    Mia    Justin
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Announcements, Reminders

- Programming Assignment 1 will be released later today
  - Due Tuesday, April 25
- Resubmission Cycle 1 will be released tomorrow, due Thurs April 27
- Feedback released tomorrow for
  - Programming Assignment 0
  - Resubmission Cycle 0
- Quiz 0: tomorrow, April 20 during section
Last Time

• Nested for loops
  • Syntax & conventions: \((i, j, k)\)
  • Applications
• Random
  • \texttt{nextInt(int max)}: returns random int value \([0, \text{max})\)
i.e. between 0 and \text{max} - 1

\[
\text{Random type rand name} = \text{new Random();}
\]
(PCM) Methods

Writing our own *methods* allow us to define our own statements / commands in Java!

- Naming conventions for methods are the same as variables: camelCase

```java
public static void myMethod() {
    /***
     * Your code here
     ***/
}
```
What is the output of this program?

A. Hello!
   Goodbye.
   Welcome!!
   Glad you're here.

B. Hello!
   Welcome!!
   Glad you're here.

C. welcome
   hello
   welcome
   glad

D. Welcome!!
   Hello!
   Welcome!!
   Glad you're here.
Scope

The part of a program where a variable exists.

- From its declaration to the end of the { } braces
- Ex: a variable declared in a for loop only exists in that loop
- Ex: a variable declared in a method exists only in that method

```java
public static void example() {
    System.out.println("hello");
    int x = 3;
    for (int i = 1; i <= 10; i++) {
        System.out.println(x);
    }
}
```

`i's scope`  `x's scope`
Class Constants

A fixed value visible to the whole program (the entire class).

• Value can be set only at declaration; cannot be reassigned (so the value is constant)

```java
public static final type NAME_OF_CONSTANT = expression;
```