

CSE 121 – Lesson 6

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Music: [121 23sp Lecture Vibes](#) 



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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
 - `nextInt(int max)`: returns random int value [0, max) i.e. between 0 and max-1

Random rand = new Random();
type name Random creation code

(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: camelCased

```
public static void myMethod() {  
    /**  
    Your code here  
    **/  
}
```

Poll in with your answer!



```
public class MyClass {  
    public static void main(String[] args) {  
        welcome();  
        hello();  
        welcome();  
        glad();  
    }  
  
    public static void hello() {  
        System.out.println("Hello!");  
    }  
  
    public static void goodbye() {  
        System.out.println("Goodbye.");  
    }  
  
    public static void welcome() {  
        System.out.println("Welcome!!");  
    }  
  
    public static void glad() {  
        System.out.println("Glad you're 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

```
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*)

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