

Welcome to CSE 121!

Simon Wu

Summer 2024

Use this QR code as one way to ask questions!



TAs:

Trey	Hannah	Mia	Vivian	Jolie	Colton	Ziao
------	--------	-----	--------	-------	--------	------

[sli.do #cse121](https://sli.do/#cse121)

Reminders for this Week

- July 4th tomorrow
 - No quiz section
 - R0 will be due on Friday @ 11:59 pm instead
- Lecture this Friday will be **recorded**
- Office hours updates
 - IPL will be *closed* on July 4th
 - Simon's OH will be cancelled this week (email me for apt)
 - Reminder that we have virtual OH's available!

Course Updates

- We are cutting a Creative Assignment this quarter!
- We will be releasing C1 this **Friday**
- Course Calendar updated on Website
- Syllabus has changed
 - Final will now be worth 6 ESN grades, but an additional lowest exam grade will be dropped
 - Please see the pinned Ed post for more details

Quiz Reminders

- First quiz will be ***next Thursday, 4/11 in section***
 - Email Simon or your TA ASAP if you can't make it!
 - Must show up *in-person*
- Quiz will be **on paper**, timed for 55 minutes
 - Next Tuesday's quiz section will be quiz review!
 - Open (unlimited, printed) note
- More info about our quiz on our course website!

Last time: for loops!

For loops are our first *control structure*

A syntactic structure that *controls* the execution of other statements.

```
for ( initialization ; test ; update ) {  
    body (statements to be repeated)  
}
```

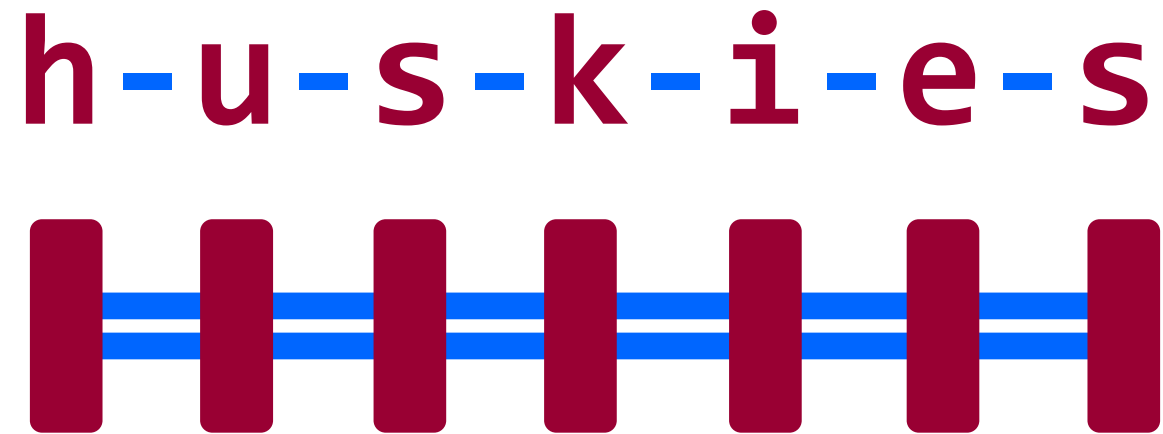
Fencepost Pattern 1

Some task where one piece is repeated n times, and another piece is repeated $n-1$ times and they alternate

h-u-s-k-i-e-s

Fencepost Pattern 2

Some task where one piece is repeated n times, and another piece is repeated $n-1$ times and they alternate



(PCM) Nested for loops

```
for (int outerLoop = 1; outerLoop <= 5; outerLoop++) {  
    System.out.println("outer loop iteration #" + outerLoop);  
    for (int innerLoop = 1; innerLoop <= 3; innerLoop++) {  
        System.out.println("    inner loop iteration #" + innerLoop);  
    }  
    System.out.println(outerLoop);  
}
```


Poll in with your answer!



[sli.do #cse121](#)

What output is produced by the following code?

```
for (int i = 1; i <= 5; i++) {  
    for (int j = 1; j <= i; j++) {  
        System.out.print(i);  
    }  
    System.out.println();  
}
```

A.

1
12
123
1234
12345

B.

i
ii
iii
iiii
iiiii

C.

1
22
333
4444
55555

Poll in with your answer!



What code produces the following output?

A.

```
for (int i = 1; i <= 5; i++) {  
    for (int j = 1; j <= i; j++) {  
        System.out.print(i);  
    }  
    System.out.println();  
}
```

C.

```
for (int i = 1; i <= 5; i++) {  
    for (int j = 1; i <= j; j++) {  
        System.out.print(j);  
    }  
    System.out.println();  
}
```

B.

```
for (int i = 1; i <= 5; i++) {  
    for (int j = 1; j <= i; j++) {  
        System.out.print(j);  
    }  
    System.out.println();  
}
```

D.

```
for (int i = 1; i <= 5; i++) {  
    for (int j = 1; j <= i; i++) {  
        System.out.print(j);  
    }  
    System.out.println();  
}
```

—sli.do #cse121

1

12

123

1234

12345

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.print(x);  
    }  
}
```

i's scope {

x's scope }