

CSE 121 – Lesson 4

Miya Natsuhara

Autumn 2023

Music: [121 23au Lecture Tunes](#) 



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

TAs:	Trey	Christina	Sahej	Vinay	Kriti
	Sebastian	Colton	Anju	Maria	Minh
	Annie	Janvi	Jonus	Shreya	Vivian
	Jasmine	Arkita	Lydia	Andy	Nicole
	Christian	Vidhi	Luke	Nicolas	Simon
	Lucas	Ritesh	Andras	Shayna	Jessie
	Logan	Hibbah	Archit	Hannah	Lydia
	Jacob	Julia	Ayesha	Aishah	Yijia

Announcements, Reminders

- C1 releasing later today (due Tues, Oct 17)
- Feedback for Creative Project 0 released yesterday
 - Use the [Grade Checker tool](#) to track your grades!
- Quiz 0: Thursday, October 19 during section.
 - Bring device to take quiz on! (e.g., laptop, surface)
- Resubmission form for R0 releasing tomorrow (due Thurs, Oct 19)
- Remember – IPL is in person! (For async help, use the message board)
- Final Exam has been scheduled: **Wednesday, Dec 13 12:30 – 2:20pm**
- Code Quality Guide updated!

Resubmissions


In general, you may revise resubmit a given Programming Assignment or Creative Project each week based on the feedback you receive with **no penalty**. The grade of your resubmission will *completely replace* your previous grades for that assignment.

Logistics:

- One resubmission per week
 - An assignment is only eligible for resubmission the 3 cycles after its feedback is posted
- There are 8 resubmission cycles this quarter (all listed on the [course calendar](#))
- To use a resubmission, you will need to:
 - Set the submission you want to be graded as "Final"
 - Fill out a form listing some information (Name, assignment, what you changed, etc.)

Last Time...

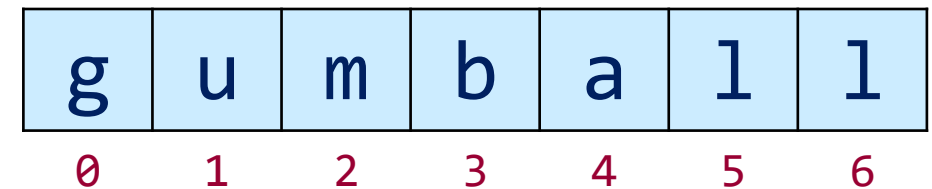
- Variables

- Container that stores a specific data type
- Must declare & initialize!
- Manipulate, modify, reuse 

```
// declare AND initialize  
int version = 5;
```

- Strings

- Sequence of characters treated as one, yet can be indexed as individual parts
- char, represents a single character





Debugging

We also started to think about *debugging* with the last activity in class on Friday (BuggyMadLibs.java)

Bugs happen – debugging is a natural part of programming!

Ways to approach debugging?

(PCM) for loops!

For loops are our first *control structure*

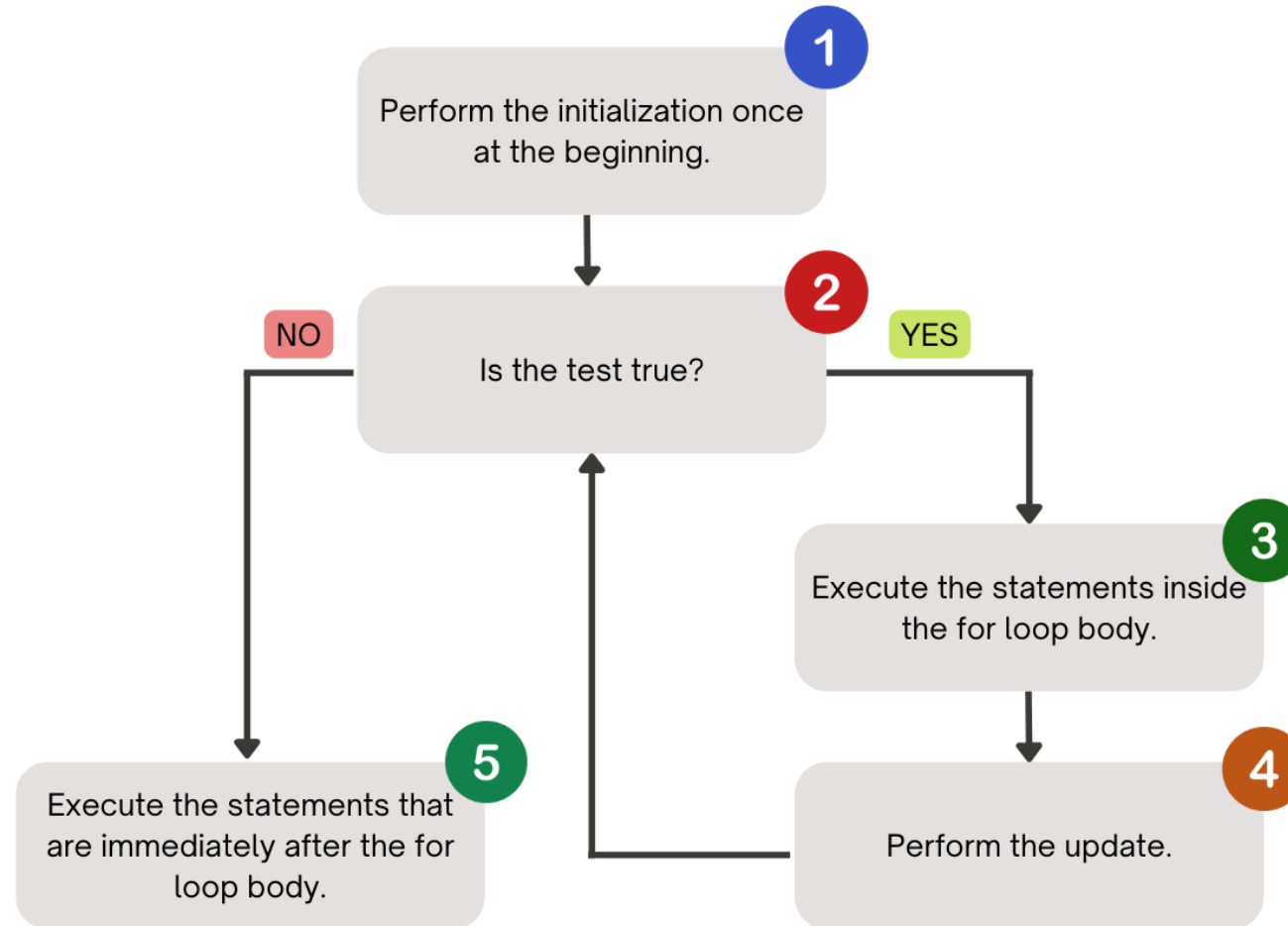
A syntactic structure that *controls* the execution of other statements.

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

(PCM) for loops!

```
for (int counter = 1; counter <= 5; counter++) {  
    System.out.println("I love CSE 121!");  
}
```

(PCM) for loops!



Poll in with your answer!



What output does the following code produce?

```
for (int i = 1; i <= 6; i++) {  
    System.out.println(i + " squared = " + i * i);  
}
```

A.

```
i squared = i*i  
i squared = i*i  
i squared = i*i  
i squared = i*i  
i squared = i*i  
i squared = i*i
```

B.

```
i squared = i * i  
i squared = i * i  
i squared = i * i  
i squared = i * i  
i squared = i * i  
i squared = i * i  
i squared = i * i
```

C.

```
1 squared = 1  
2 squared = 4  
3 squared = 9  
4 squared = 16  
5 squared = 25  
6 squared = 36
```

D.

```
1 squared = 11  
2 squared = 22  
3 squared = 33  
4 squared = 44  
5 squared = 55  
6 squared = 66  
7 squared = 77
```

(PCM) String traversals

```
// For some String s  
for (int i = 0; i < s.length(); i++) {  
    // do something with s.charAt(i)  
}
```

Fencepost Pattern

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

g-u-m-b-a-1-1

Fencepost Pattern

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

