

# CSE 121 – Lesson 8

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Music:  [k-pop girlies playlist](#) 

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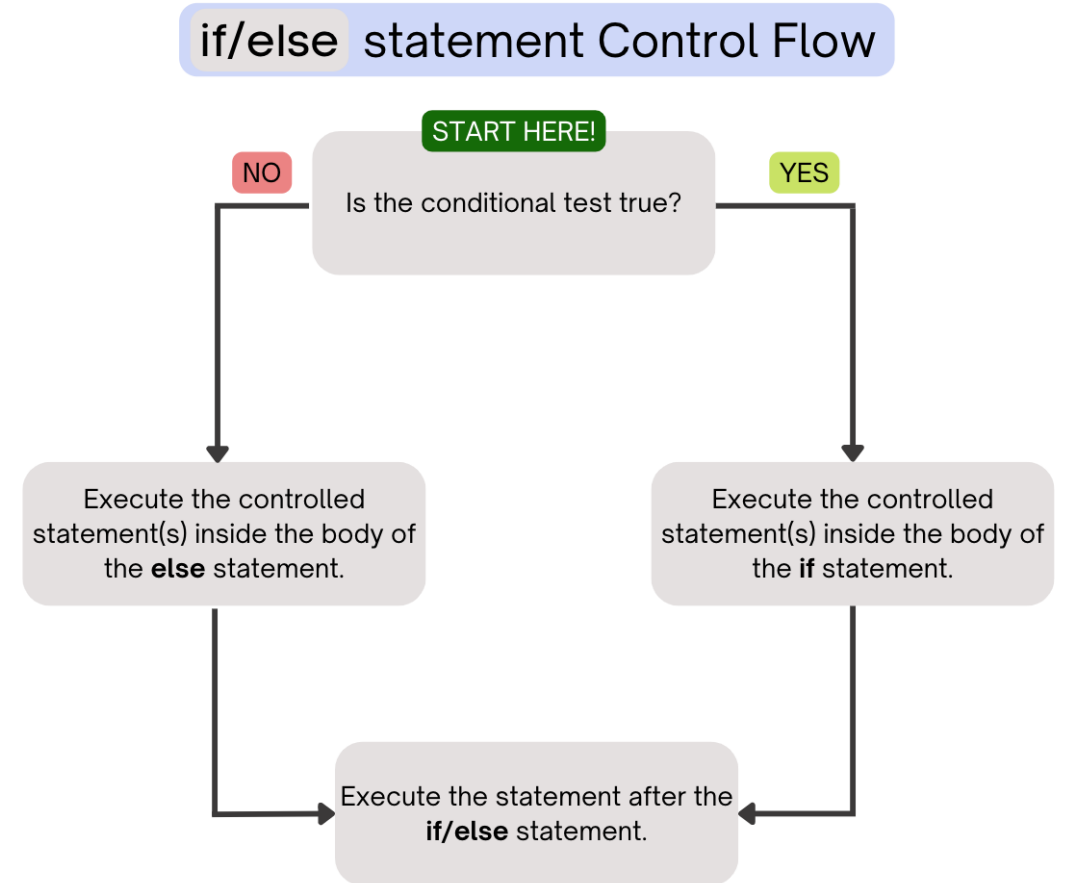
# Announcements, Reminders

- Programming Assignment 1 Election Sim due yesterday! Slay!
- Creative Project 2 released later today, due next Tuesday 7/25 @ 11:59 PM
- Resub 2 is due tomorrow 7/20 11:59 PM
- Quiz 1 (Take-home): next Monday 7/24
  - Will be on: Methods (Param & Returns), Conditionals, While Loops, Scanner
- Final exam August 8/16 4:30 – 6:30 PM in PAA A102
  - If you have a conflict reach out-reach out ASAP – the expectation is you all can make that time.

# (Last Time) Conditionals

```
if ( test ) {  
    statement(s)  
} else {  
    statement(s)  
}
```

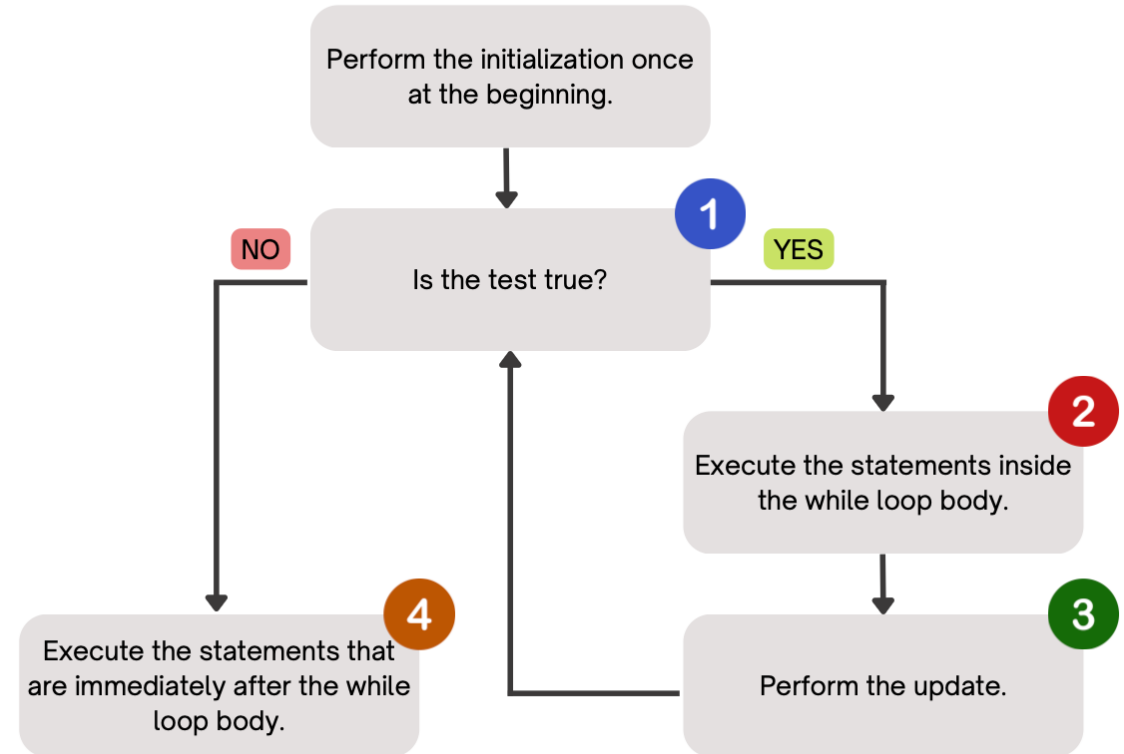
Executes a block of statements if the test is true, executes another block of statements if the test is false



# (Last Time) While Loops

```
while (test) {  
    body (statements to be repeated)  
}
```

Repeatedly executes its body as long as its logical test is true.



# (PCM) Scanner

An **object** that we can use to *read in input*  
In the `java.util` package

`Scanner` `console` = `new Scanner(System.in);`  
type name Scanner construction code

Methods	Description
<code>nextInt()</code>	Reads the next token from the user as an <code>int</code> and returns it
<code>nextDouble()</code>	Reads the next token from the user as a <code>double</code> and returns it
<code>next()</code>	Reads the next token from the user as a <code>String</code> and returns it
<code>nextLine()</code>	Reads an <i>entire line</i> from the user as a <code>String</code> and returns it

# (PCM) Tokens

A unit of user input, as read by the Scanner

- Tokens are separated by *whitespace* (spaces, tabs, new lines)

```
23 John Smith 42.0 "Hello world" $2.50 " 19"
```

# Fencepost Pattern

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

