



CS180 Lab 05

Repetition

Week 5
Feb. 4 - Feb. 10



Loops

- **Most programs execute from top to bottom**
 - But sometimes we need to repeat a process or statement in order to solve a task
- **Loops allow us to go back to part of the program or make statements repeat**



while loop

...

```
while(condition == true) {  
    statement(s) to execute  
}
```

...

← As long as this condition is true, the statements inside will execute.

Note: The block of statements will *not* run unless the condition is true.



do while loop

...

```
do {  
    statement(s) to execute  
} while(condition == true);
```

...

← The statement(s) will run at least once.

← The statement(s) will repeat as long as the condition is true.



for loop

...

```
for(initialize; condition; counter) {  
    statement(s) to execute  
}
```

...

← As long as this condition is true, the statements inside will execute.

Note: The block of statements will *not* run unless the condition is true.