



- ✓

1. Intro to Loops
- ✓

2. While Loops
- ✓

3. Parts of a While Loop
- ✓

4. Quiz: JuliaJames (4-1)
- ✓

5. Quiz: 99 Bottles of Juice (4-2)
- ✓

6. Quiz: Countdown, Liftoff! (4-3)
- ✓

7. For Loops
- ✓

8. Parts of a For Loop
- ✓

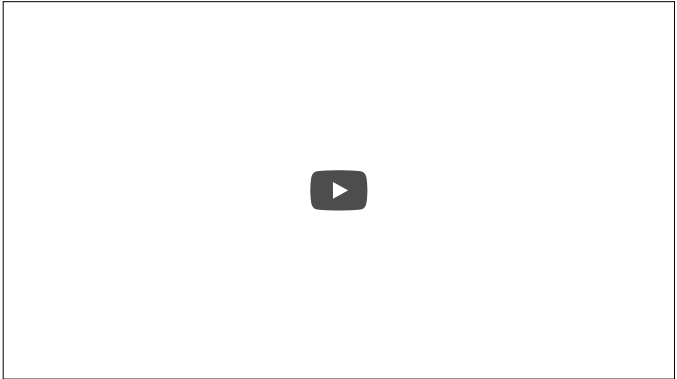
9. Nested Loops
- 10. Increment and Decrement
- 11. Quiz: Changing the Loop (4-4)
- 12. Quiz: Fix the Error 1 (4-5)
- 13. Quiz: Fix the Error 2 (4-6)
- 14. Quiz: Factorials! (4-7)
- 15. Quiz: Find my Seat (4-8)
- 16. Lesson 4 Summary



Mentorship

Get support and stay on track

Nested Loops



Did you know you can also *nest* loops inside of each other? Paste this nested loop in your browser and take a look at what it prints out:

```
for (var x = 0; x < 5; x = x + 1) {  
  for (var y = 0; y < 3; y = y + 1) {  
    console.log(x + ", " + y);  
  }  
}
```

Prints:

0,0
0,1
0,2
1,0
1,1
1,2
2,0
2,1
2,2
3,0
3,1
3,2
4,0
4,1
4,2

Notice the order that the output is being displayed.

For each value of **x** in the outer loop, the inner for loop executes completely. The outer loop starts with **x = 0**, and then the inner loop completes it's cycle with all values of **y**:

`x = 0` and `y = 0, 1, 2` // corresponds to `(0, 0)`, `(0, 1)`, and `(0, 2)`

Once the inner loop is done iterating over **y**, then the outer loop continues to the next value, **x = 1**, and the whole process begins again.

`x = 0` and `y = 0, 1, 2` // `(0, 0)` `(0, 1)` and `(0, 2)`
`x = 1` and `y = 0, 1, 2` // `(1, 0)` `(1, 1)` and `(1, 2)`
`x = 2` and `y = 0, 1, 2` // `(2, 0)` `(2, 1)` and `(2, 2)`
etc.



- ✓

1. Intro to Loops
- ✓

2. While Loops
- ✓

3. Parts of a While Loop
- ✓

4. Quiz: JuliaJames (4-1)
- ✓

5. Quiz: 99 Bottles of Juice (4-2)
- ✓

6. Quiz: Countdown, Liftoff! (4-3)
- ✓

7. For Loops
- ✓

8. Parts of a For Loop
- ✓

9. Nested Loops
- 10. Increment and Decrement
- 11. Quiz: Changing the Loop (4-4)
- 12. Quiz: Fix the Error 1 (4-5)
- 13. Quiz: Fix the Error 2 (4-6)
- 14. Quiz: Factorials! (4-7)
- 15. Quiz: Find my Seat (4-8)
- 16. Lesson 4 Summary

Mentorship

Get support and stay on track

QUIZ QUESTION

What will this loop print out?

```
for (var i = 0; i <= 6; i = i + 2) {  
  console.log(i);  
}
```

☐ 1 2 3 4 5 6

☐ 0 1 2 3 4 5 6

☐ 1 3 5

☐ 1 3 5 7

☐ 0 2 4

☒ 0 2 4 6

SUBMIT

NEXT