

# Control Flow





# Overview

```
1  /*
2    - What is control flow?
3    - if/else/if else
4    - Logical operators
5  */
6
7
8
9
10
```



first!  
second!

# What is control flow?

```
1  /* generally, our code runs from top to
2     bottom */
3
4  console.log('first!');
5  console.log('second!');
6
7
8
```



# What is control flow?

```
1  /* often, we don't want every line of our
2     code to run in order */
3
4  /* in some cases, we may not want a line of
5     code to run at all! */
6
7  /* control flow enables us to change the
8     order in which our code runs */
```



# if statement

```
1  /* the if statement is an example of a JS
2     feature that allows us to affect control
3     flow */
4
5
6
7
8
```



in the if!

# if statement

```
1 // if statement starts with the if keyword
2 // then, two parens around an expression
3 /* finally, curly brackets surrounding the
4    lines of code to run; these lines only run
5    if the expression evaluates to true */
6 if (true) {
7     console.log('in the if');
8 }
```



can i see you?  
i'll be there!

# if statement

```
1 console.log('can i see you?');
2
3 if (false) {
4     console.log('sorry, no');
5 }
6
7 if (true) {
8     console.log('i\'ll be there!');
9 }
```



wow that's a seven!

# if statement

```
1 let neatNum = 7;
2
3 if (neatNum === 7) {
4   console.log('wow that\'s a seven!');
5 }
6
7 if (neatNum === 8) {
8   console.log('wow that\'s an eight!');
9 }
```





# else clause

```
1  /* the code in an else block will run only if
2     the expression in the if evaluates to false */
3  if (false) {
4      console.log('in the if');
5  }
6  else {
7      console.log('in the else');
8  }
9
```



# else if clause

```
1  /* the code in an else if clause has its own
2     condition and only runs if the condition
3     evaluates to true */
4  if (false) {
5     console.log('in the if');
6  }
7  else if (true) {
8     console.log('in the else if');
9  }
```



## else if clause

```
1  let name = 'Ada';
2  if (name === 'Ada') {
3    console.log('Hi Countess Lovelace!');
4  }
5  else if (name === 'Grace') {
6    console.log('Hi Rear Admiral Hopper!');
7  }
8  else {
9    console.log('Hi friend!');
10 }
```



## else if clause

```
1 let name = 'Grace';
2 if (name === 'Ada') {
3   console.log('Hi Countess Lovelace!');
4 }
5 else if (name === 'Grace') {
6   console.log('Hi Rear Admiral Hopper!');
7 }
8 else {
9   console.log('Hi friend!');
10 }
```



Hi friend!

## else if clause

```
1 let name = 'Ashi';
2 if (name === 'Ada') {
3   console.log('Hi Countess Lovelace!');
4 }
5 else if (name === 'Grace') {
6   console.log('Hi Rear Admiral Hopper!');
7 }
8 else {
9   console.log('Hi friend!');
10 }
```



# Logical operators

```
1  // && is the logical 'and' operator
2  /* it will return true if placed between two
3     boolean values and both are true */
4  if (true && true) {
5     console.log('in the first if');
6  }
7
8  if (true && false) {
9     console.log('in the second if');
10 }
```



# Logical operators

```
1  // || is the logical 'or' operator
2  /* it will return true if placed between two
3     boolean values and either is true */
4  if (false || true) {
5     console.log('in the first if');
6  }
7
8  if (false || false) {
9     console.log('in the second if');
10 }
```



# Recap

```
1  /*
2      - What is control flow?
3      - if/else/if else
4      - Logical operators
5  */
6
7
8
9
10
```