

Installation & Setup



Overview

```
1  /* Applications you will need to install
2
3  - Visual Studio Code
4  - Prettier
5  - ESLint
6  - Go Live
7  - Node
8  - Git
9
10 File to get:
   https://github.com/FullstackAcademy/bootcamp-prep/archive/master.zip
```



Git basics

```
1  Commands to know for git
2  - git init
3  .gitignore file
4  - git add .
5  - git commit -m "This is a commit"
6  - git push
7  - git pull
8  - git checkout -b newBranchName
9  - git checkout existingBranchName
10 - git branch
```



Terminal basics

1 Commands to know for terminal

2 - cd

3 - ls / dir

4 - pwd

5 - npm install

6 - npm run test

7

8

9

10

Values and Types



Overview

```
1  /*
2    - What is a value?
3    - What is a type?
4    - Typeof operator
5    - Number type
6    - Boolean type
7    - String type
8  */
9
10
```



What is a value?

```
1  /*
2    - Software stores, retrieves, and manipulates
3      values
4    - The number 5 is an example of a value
5    - The string 'apples' is also a value
6  */
7
8
9
10
```



5 is: 5
apples is: apples

What is a value?

```
1 // 5 is a value
2 console.log('5 is:', 5);
3
4 // apples is a value
5 console.log('apples is:', 'apples')
6
7
8
```




What is a type?

```
1  /*
2    - Values have a type
3    - The type of 5 is number
4    - The type of 'apples' is string
5    - Values of the same type share similar behaviors
6      in JavaScript
7    - e.g., string values can be uppercased ('apples'
8      to 'APPLES') but number values can't
9  */
10
```



console.log

- 1 - console.log is a function
- 2
- 3
- 4 - console.log prints the arguments passed to it
- 5 >console.log('Hello there')
- 6
- 7
- 8



number
string

typeof operator

```
1  /* typeof operator returns the type of a value */
2  console.log(typeof 5);
3  console.log(typeof 'apples');
4
5
6
7
8
```



typeof operator

```
1  /* the typeof the value returned by typeof
2  is a string! */
3
4  console.log(typeof typeof 5);
5
6
7
8
```



Basic data types to know

```
1  /*
2    - number
3      e.g. 1, 2, 3.33, -4
4
5    - boolean
6      true, false
7
8    - string
9      e.g. "apple", "TEJ", "Hello there!"
10 */
```



number
number
number

number type

```
1 console.log(typeof 5);  
2  
3 console.log(typeof 2.55);  
4  
5 console.log(typeof -1000);  
6  
7  
8
```

Things to do with number



15
5
50
2

Basic arithmetic

```
1 console.log(10 + 5);  
2  
3 console.log(10 - 5);  
4  
5 console.log(10 * 5);  
6  
7 console.log(10 / 5);  
8
```




Remainder operator

```
1  /* the % operator divides two numbers and
2     returns the remainder */
3
4  console.log(10 % 5);
5
6  console.log(11 % 5);
7
8
```



true
false

Comparing numbers

```
1  /* use the strictly-equals operator (===) to
2     compare numbers */
3  console.log(10 === 10);
4
5  console.log(10 === 11);
6
7  /* === returns true or false, the two boolean
8     values in JS */
```



false
true

Comparing numbers

```
1  /* use the strictly-not-equals operator (!==)
2     to compare numbers */
3  console.log(10 !== 10);
4
5  console.log(10 !== 11);
6
7
8
```



Comparing numbers

true
false
true
false

```
1 // <, <=, >, >= work just like math!  
2 console.log(9 < 10);  
3  
4 console.log(9 > 10);  
5  
6 console.log(9 <= 10);  
7  
8 console.log(9 >= 10);
```



boolean
boolean

Boolean type

```
1 // only two values have the boolean type
2 console.log(typeof true);
3
4 console.log(typeof false);
5
6
7
8
```



string
string

String type

```
1 // create strings with single quotes
2 console.log(typeof 'happy');
3
4 // or double quotes
5 console.log(typeof "also happy");
6
7
8
```

Things to do with string



Accessing a character

```
1 // strings are a string of characters
2 // access a character using bracket notation
3
4 // the 'first' character has an index of 0
5 console.log('happy'[0]);
6 console.log('happy'[1]);
7
8
```




.length property

```
1 // strings have a .length property
2 console.log('happy'.length);
3
4
5
6
7
8
```



Concatenation

```
1  /* use the + operator to squish two strings or
2     more together */
3
4  console.log('happy' + ' ' + 'together');
5
6
7
8
```



true
true

Comparing string values

```
1 // === and !== work with strings, too
2 console.log('same' === 'same');
3 console.log('same' !== 'different');
4
5
6
7
8
```



false
false

Comparing strings with numbers, booleans

```
1  /* a string will never be strictly equal to
2     a value of a different type */
3
4  console.log('true' === true);
5  console.log('10' === 10);
6
7
8
```



String methods

```
1  /*
2    - A method is an action that can be performed on a
3      value
4    - Different types have different built-in methods
5    - To call a method:
6
7      <value>.<name of method>(<args, if any>)
8  */
9
10
```



String methods

```
1  // toUpperCase
2  console.log('so happy'.toUpperCase());
3
4
5
6
7
8
```



String methods

```
1 // what if we forget to invoke a method?  
2 console.log('so happy'.toUpperCase);  
3  
4  
5  
6  
7  
8
```



String methods

```
1 // toLowerCase
2 console.log('SHHH BE QUIET'.toLowerCase());
3
4
5
6
7
8
```




Recap

```
1  /*
2    - What is a value?
3    - What is a type?
4    - Typeof operator
5    - Number type
6    - Boolean type
7    - String type
8  */
9
10
```