LECTURE

CONDITIONALS

IF AND ELSE STATEMENTS

▸ It's very common when you write code, you'll want to perform different actions for different decisions.

▸ In your code you can do this by using Conditional Statements like if and else.

▸**if() statement will run the conditional inside the parentheses and return a value if true.**

▸ example:

```
if (conditional) {
    //block of code to be executed if the condition is true
}
```

▸ **else statement will only run when the if() returns false.**

▸ **example:**

```
if(conditional){
    //block of code to be executed if the condition is true
}else{
    //block of code to be executed if the condition is false
}
```

```
function greaterThanTen(num) {
    if (num > 10) {
        return 'num is great than 10';
    } else {
        return 'num is not greater than 10';
    }
}
```

‣ Remember that we don't need a condition for the else statement.

‣ The else statement will always run when the **if** condition isn't true.

BOOLEANS

‣ Only Two types of Booleans in JavaScript

‣True

‣False

▸ Comparison Operators evaluate and return Boolean Values. True and False.

▸ List of the most common comparison operators

- > "Greater than"

- < "Less than"

- >= "Greater than or Equal to"

- <= "Less than or Equal to"

▸ List of most common Equality operators

- === "Equal to" or "Strictly Equal to" (Identity operator)

- !== "Not equal to (Non-Identity operator)

▸ else if statement extends an IF statement. The else if statement lets your program evaluate additional expressions.

```
function guessTheNumber(num){
  if(num===5){
    return "You guessed the number!! "
  }else if(num === 4 || num === 6){
    return "Your very close!"
  }else{
    return "keep guessing!! "
  }
}
```

▸ The else if statement lets you add additional conditions to check for. Letting the user know if they are close.

▸ Logical Operators.

▸ Three Logical Operators in JavaScript

▸ && "And Operator" Both Conditions must equal TRUE

▸ || "Or Operator" One Condition must be TRUE

▸ ! "Not Operator" Toggles a statement between TRUE/FALSE

```javascript
var sky = 'blue';
var clouds = 'false';
if (sky === 'blue' && clouds === true) {
  console.log('Cloudy Day');
} else {
  console.log('Its a Beautiful Day!');
}
```

What will be the message??

TRUTHY OR FALSY VALUES

▸ Truthy: a value that translates to true when evaluating in a Boolean context

https://developer.mozilla.org/en-US/docs/Glossary/Truthy

▸ Falsy: a value that translates to false when evaluating in a Boolean context

https://developer.mozilla.org/en-US/docs/Glossary/Falsy

▸ Falsy Values

Undefined

NAN

null

0(zero)

"" (empty sting)

```
function trueOrFalse(val)
if(val){
return "The Value is Truthy"
}else{
  return "the value is Falsy"
}
```

EVERYTHING else is Truthy

In this Challenge. How can i get the last line in the function to run.

Think of what we need to adjust to make this happen.

https://repl.it/@Delune/IFELSE-challenge#index.js

```javascript
1    // GUESS THE NUMBER
2    function guessTheNumber(num) {
3      if (num === 5) {
4        return 'You guessed the number!!';
5      } else if (num === 4 || num === 6) {
6        return 'Your very close!';
7      } else {
8        return 'keep guessing!!';
9      }
10     console.log("last line in the function!")
11   }
12
13   guessTheNumber(5)
```

In this challenge see if you can get the correct message to print out.

"Good luck and Bon Voyage!"

https://repl.it/@Delune/Challenge-2#index.js

```javascript
//VACATION!!
function tripToHawaii(){
    if(map && phoneCharger){
        if(packed === "ready"){
            return "Good luck and Bon Voyage!";
        } else if(packed === "need more supplies"){
            return "Amazon has express shipping!";
        } else if(packed === "need luggage"){
            return "Can only be 50 pounds!";
        } else {
            return "Are you ready or not?";
        }
    } else if(map || phoneCharger){
        return "You need both items, map and a
        phoneCharger";
    } else {
        return "You have a lot of work to do, hopefully you
        packed!";
    }
}

tripToHawaii()
```