

CONDITIONAL STATEMENTS: IF

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IF STATEMENTS

Conditional statements represent forks in a path

When a program encounters a conditional statement, it will evaluate a given condition then decide what code to run

```
if (password === 'SuperSecretPassword') {  
  alert('Your password is correct!');  
}
```

```
if (condition) {  
  ... code to run if condition is truthy ...  
}
```

IF ... ELSE

If statements can also have an **else** block following the if block:

```
if (password === 'SuperSecretPassword') {  
  alert('Your password is correct!');  
} else {  
  alert('Wrong password!');  
}
```

The **else** block will run only when the if condition is false

IF ... ELSE IF ... ELSE

Test more conditions in the same statement with **else if**:

```
if (color === "red") {  
  hexColorCode = '#FF0000';  
} else if (color === "black") {  
  hexColorCode = '#000000';  
} else {  
  hexColorCode = null;  
}
```

IF ... ELSE IF ... ELSE

Test more conditions in the same statement with **else if**:

```
if (color === "red") {  
  hexColorCode = '#FF0000';  
} else if (color === "black") {  
  hexColorCode = '#000000';  
} else if (color === 'white') {  
  hexColorCode = '#ffffff';  
} else {  
  hexColorCode = null;  
}
```

TRUTHY & FALSY

If statements check for whether a condition is **truthy** or **falsy**

These are slightly different concepts from the Boolean values of **true** and **false**

Values can be converted to other data types - a number to a string, a string to a Boolean, a Boolean to a number, etc

A non-Boolean value that would be **true** if converted to Boolean is considered **truthy**; likewise, a non-Boolean value that would be false if converted to Boolean is **falsy**

TRUTHY & FALSY

How to determine whether a value is **truthy** or **falsy**:

These values are **falsy** (would be false if converted to Boolean):

false, **undefined**, **null**, **0**, **-0**, **NaN**, or the empty string
(`""` or `"` - pair of empty double or single quotes)

Every other value is **truthy**, ex.: 3, -3, 'any non-empty string', etc

How is this useful?

TRUTHY & FALSY

Some conditions do have a value of Boolean true/false, ex.:

```
(password === 'SuperSecretPassword')
```

Sometimes you may only want to check that a value holds some **truthy** value, that it doesn't contain null/undefined/any other **falsy** values, ex.:

```
if (password) {  
  ... code to check if password is correct ...  
} else {  
  prompt('You must enter a password: ');  
}
```