

## Lesson 2 Demo 1

### Equality\_==\_vs\_==

**Objective:** To work on equality operator == vs ===

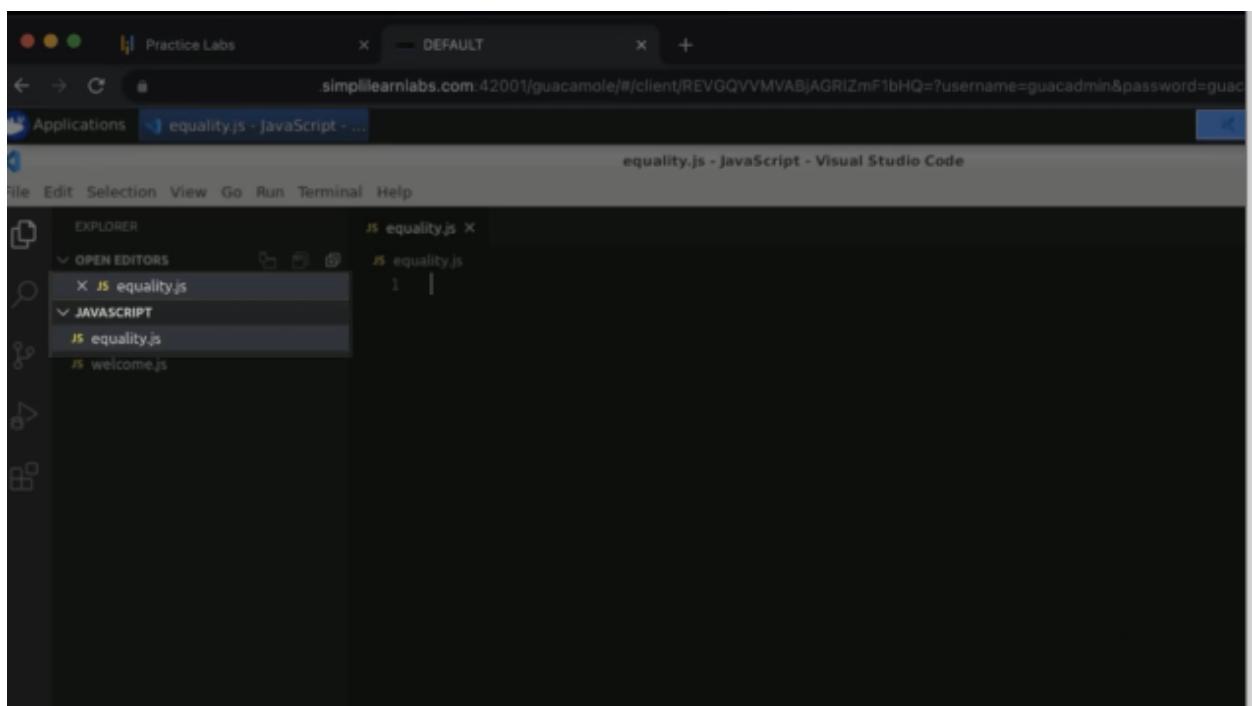
**Prerequisites:** None

Steps to be followed:

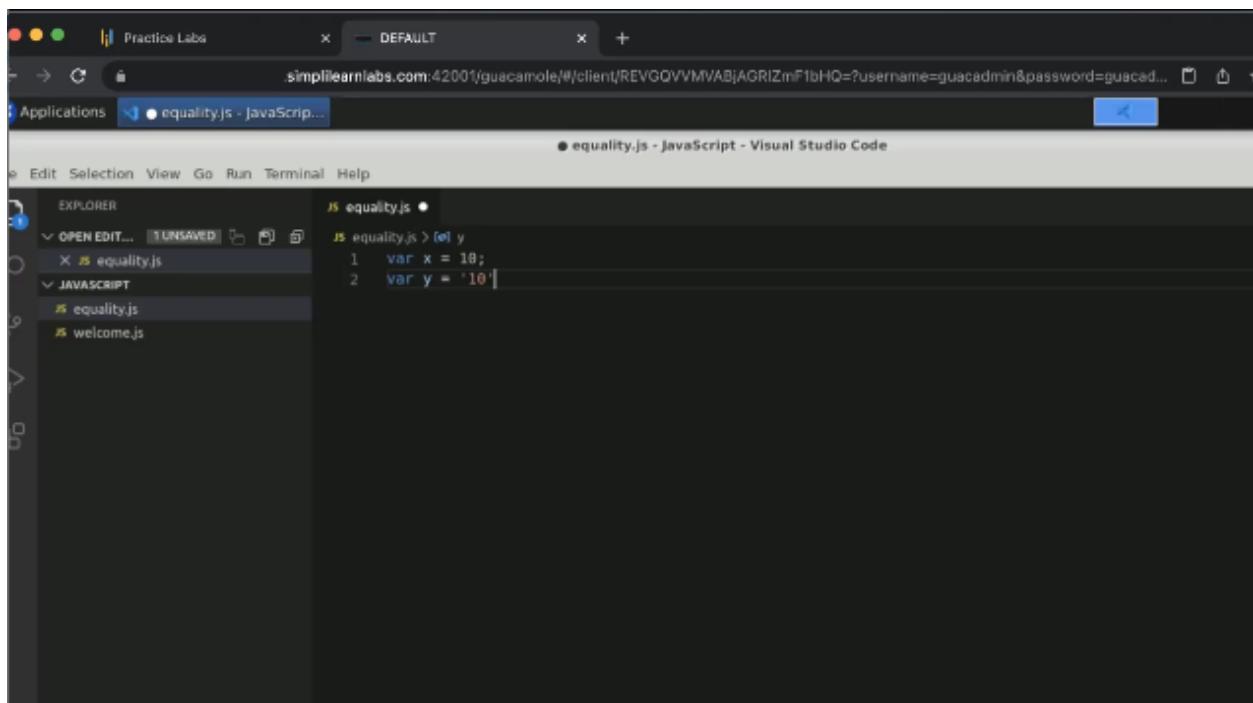
- Work on equality operator == vs ===

#### Step 1: Work on equality operator == vs ===

1.1 Create a new JavaScript program as ‘equality.js’.



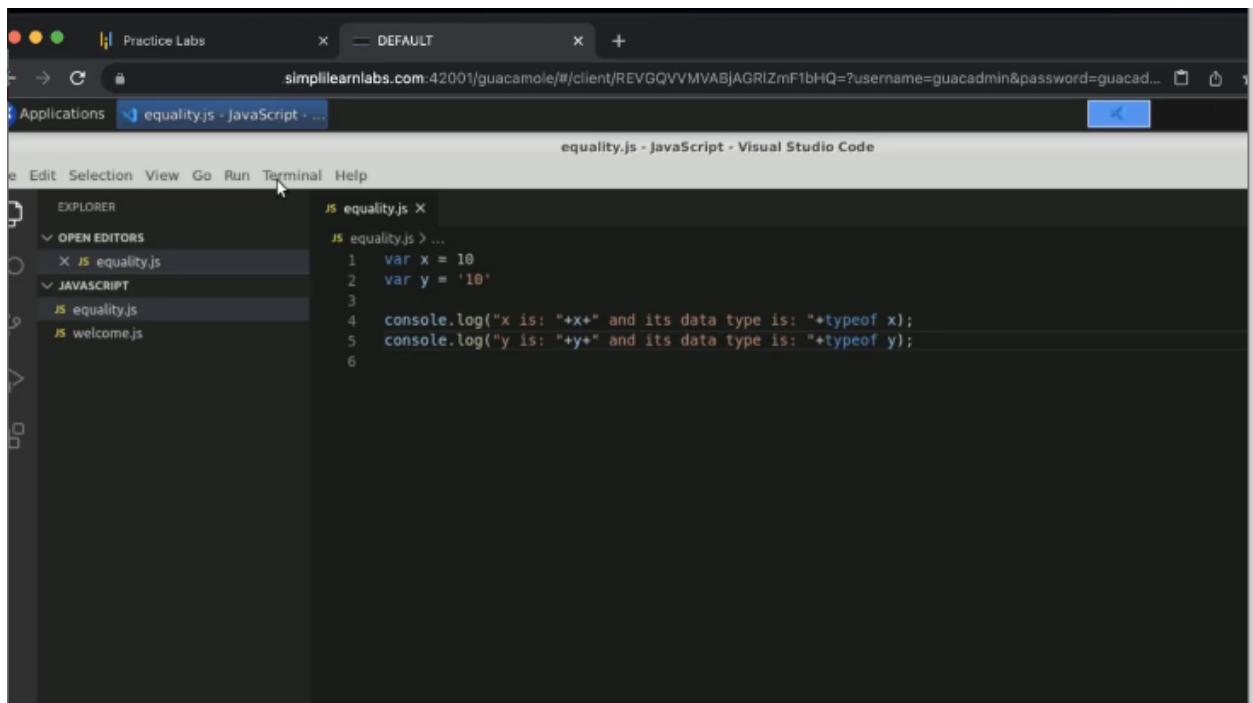
### 1.2 Add variables x and y with a value of 10.



The screenshot shows a Visual Studio Code interface with a dark theme. A browser tab at the top displays the URL `simplilearnlabs.com:42001/guacamole/#/client/REVGQVVMVABjAGRIZmF1bHQ=?username=guacadmin&password=guacadm...` . The code editor window shows a file named `equality.js` with the following content:

```
JS equality.js •
JS equality.js > (empty)
1 var x = 10;
2 var y = '10';
```

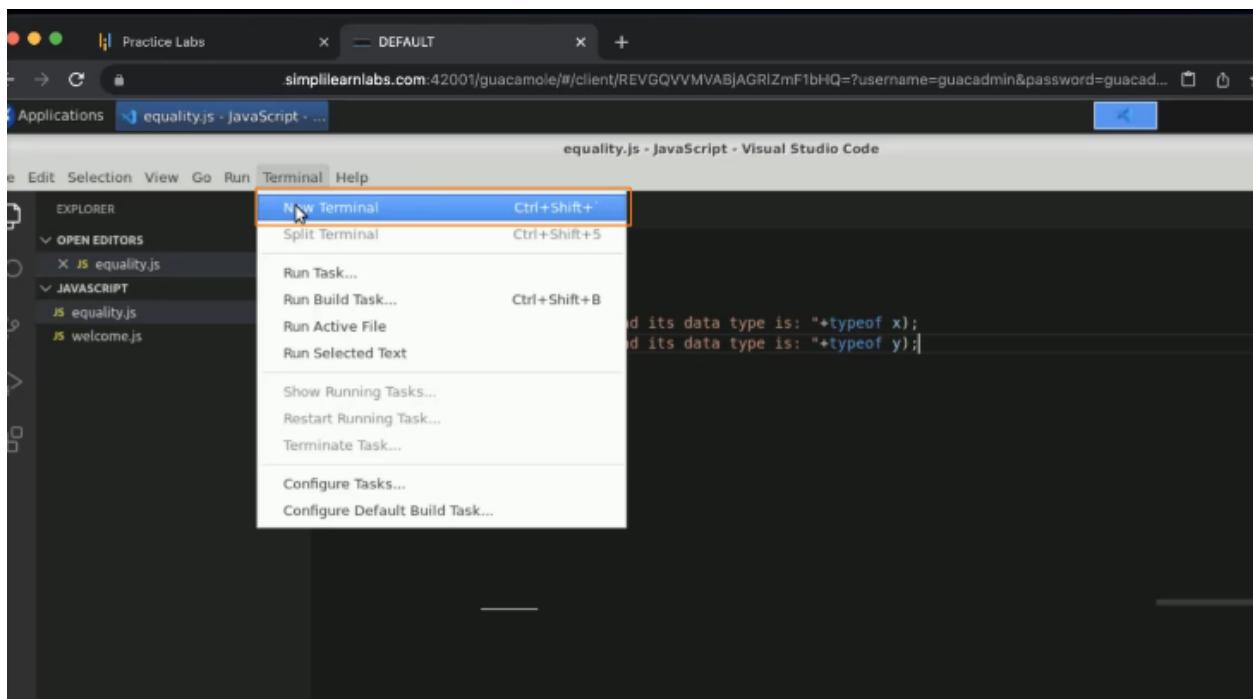
### 1.3 Perform logging on x and y.



The screenshot shows the same Visual Studio Code interface. The `equality.js` file now contains the following code:

```
JS equality.js •
JS equality.js > ...
1 var x = 10
2 var y = '10'
3
4 console.log("x is: "+x+" and its data type is: "+typeof x);
5 console.log("y is: "+y+" and its data type is: "+typeof y);
```

#### 1.4 Open the terminal.



#### 1.5 Run the 'equality.js'.

A screenshot of the Visual Studio Code interface showing the output of running the 'equality.js' file. The terminal window displays the following text:

```
erishant@gmail:ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
erishant@gmail:ip-172-31-90-232:~/Desktop/JavaScript$
```

The status bar at the bottom shows 'Ln 5, Col 60 Spaces: 4 UTF-8 LF'.

### 1.6 Create a log equality test for $x == y + (x == y)$ .

```

View Go Run Terminal Help
JS equality.js •
1 UNSAVED
JS equality.js > ...
1 var x = 10
2 var y = '10'
3
4 console.log("x is: "+x+" and its data type is: "+typeof x);
5 console.log("y is: "+y+" and its data type is: "+typeof y);
6
7 console.log("Equality Test for x == y"+(x==y));
8
9

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ []

```

Ln 7, Col 40 Spaces: 4 UTF-8 LF

### 1.7 Execute the program.

```

View Go Run Terminal Help
JS equality.js X
JS equality.js > ...
1 var x = 10
2 var y = '10'
3
4 console.log("x is: "+x+" and its data type is: "+typeof x);
5 console.log("y is: "+y+" and its data type is: "+typeof y);
6
7 console.log("Equality Test for x == y"+(x==y));
8
9

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
Equality Test for x == ytrue
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ []


```

Ln 7, Col 47 (6 selected) Spaces: 4 UTF-8 LF

## 1.8 Use triple equal to instead of double equal to in the previous step.

```

View Go Run Terminal Help
js equality.js *
1 UNSAVED
JS equality.js > ...
1 var x = 10
2 var y = '10'
3
4 console.log("x is: "+x+" and its data type is: "+typeof x);
5 console.log("y is: "+y+" and its data type is: "+typeof y);
6
7 console.log("Equality Test for x == y: "+(x==y));
8 console.log("Equality Test for x === y: "+(x===y));
9
10
11

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1:bash
y is: 10 and its data type is: string
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
Equality Test for x == y: true
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
Equality Test for x === y: false
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ []
Ln 8, Col 48 Spaces: 4 UTF-8 LF

```

## 1.9 Run the program.

```

View Go Run Terminal Help
js equality.js *
JS equality.js > ...
1 var x = 10
2 var y = '10'
3
4 console.log("x is: "+x+" and its data type is: "+typeof x);
5 console.log("y is: "+y+" and its data type is: "+typeof y);
6
7 console.log("Equality Test for x == y: "+(x==y));
8 console.log("Equality Test for x === y: "+(x===y));
9
10
11

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
1:bash
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
Equality Test for x == y: true
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ node equality.js
x is: 10 and its data type is: number
y is: 10 and its data type is: string
Equality Test for x == y: true
Equality Test for x === y: true
erishant@gmail@ip-172-31-90-232:~/Desktop/JavaScript$ []
Ln 8, Col 48 Spaces: 4 UTF-8 LF

```

