

Topic/Title: Random Number Generation in JavaScript: Building a Love Calculator  
Control Statements: Using If-Else Conditionals & Logic  
Comparators and Equality  
Combining Comparators



Keywords/Questions:

Notes:

Math.random();

Math.random(); :- generates a random number between 0 - 0.9999999999999999. The 9s are 16 digits. It might be 0 but it will never reach 1.

=== <=

=== :- used for testing for equality in JavaScript.

!== >=

- known as the "Is equal to" sign. **===** Is **equal** to

> <

- if (hale===5){console.log(5);} :-This means if hale is equal to 5, print 5.

!== :- used for testing for inequality in JavaScript.

-known as the "Is not equal to" sign.

==

-usually used and executed if the left side is not equal to the right

**===** Is **equal** to

**!==** Is **not equal** to

!=

**>** Is **greater** than

**<** Is **lesser** than

**>=** Is **greater or equal** to

**<=** Is **lesser or equal** to

&&

The difference between == and ===. A === equal sign checks if the data types are matching

||

whereas a == sign doesn't.

```
> var a = 1;
var b = "1";
```

```
< undefined
```

```
> typeof(a);
```

```
< "number"
```

```
> typeof(b);
```

```
< "string"
```

```
> if (a === b) {
  console.log("yes");
} else {
  console.log("no");
}
```

```
no
> if (a == b) {
  console.log("yes");
} else {
  console.log("no");
}
```

-The same rule

applies for the !=

sign and !===

!

Summary:

Math.random(); :-generates a random number from 0 to 0.9999999999999999. Sixteen 9s.

Conditionals:- if (x>5){} -else if(x>3 && x<=5){} -else{}

===:- equal to !==:- not equal to > :-greater than <:-less than >=:-greater or equal to <=:-lesser or equal to

== & != :-don't check if they have same data types === & !== :- check if they have same data types

&& :- "AND" combiner

|| :- "OR" combiner

! :- "NOT" combiner

## More Notes

–Best way to write if else statements

```
if (track === "clear") {  
    goStraight();  
} else {  
    turnRight();  
}
```

&&:–the "AND" combiner.

```
if (loveScore > 30 && loveScore <= 70) {  
    alert("Your love score is " + loveScore + "%");  
}
```

||:–the "OR" combiner.

!:– the "NOT" combiner.

–we only use one bracket inside the if clause