



JavaScript: If-Statements, Booleans, Comparison Operators

Definitions

If-Statement:

A control structure that allows programmers to make decisions

boolean:

A value that can be **true** or **false**

comparison operator: a symbol that compares two values

If-Statement Syntax

```
if (boolean) {  
    // All code in this code  
    // block will execute if the  
    // boolean is true  
}
```

If-Statement Example

```
1 var num = document.getElementById("in").value;  
2 if(num == 6) {  
3     console.log("You entered 6");  
4 }
```

If the value of num is not 6, line 3 will not be executed

Comparison Operators

These let us test for truth:

greater than >

less than <

greater than or equal to >=

less than or equal to <=

equal to ==

NOT equal to !=

If-Statement Example

```
if (num > 9) {  
    console.log("num is at least two digits");  
}
```

What does this do?

```
1 var secretNumber = Math.floor(Math.random() * 10) + 1;
2 function guess(){
3     var num = document.getElementById("in").value;
4     if(num != secretNumber){
5         console.log("Nope! Keep guessing!");
6     }
7 }
```