

1. Numbers, Strings, and Operators

Floating point numbers are approximations

- `0.1 + 0.2 // = 0.30000000000000004`
 - `0.1 + 0.2` is not 0.3, but 0.30000000000000004 because floating numbers are approximations (CSC 260).
 - This is not a JavaScript issue, but floating point number issue.

Shifting a number is multiplying or dividing by 2

- `1 << 2; // = 4`
 - It is 4, as 1 is multiplied by 2 (shift left) two times (the 2 in `1 << 2`).
 - It is the same as 2^2 .
 - `1 << 3` is 8, because $2^3 = 8$, and `1 << 4` is 16.

JavaScript is a weakly typed language.

- `"1, 2, " + 3; // = "1, 2, 3"`
 - JavaScript changes the number 3 into a string "3"
- `"Hello " + ["world", "!"]; // = "Hello world,!"`
 - JavaScript changes the array into a sequence of strings.