**Variables**

The first thing to note that we can define a variable without assigning it any value. This will automatically initialize the variable with a value of undefined.

1. **Create a Variable: var**

var, short for variable, is a JavaScript keyword that creates, or declares, a new variable.

The overall formula for declaring variable is

**var <variableName> = <value>;**

1. **Create a Variable: let**

The let keyword signals that the variable can be reassigned a different value. It also gives error if we attempt to create the variable again (🡪 it allows us to change values but still help avoid declaring a variable again with different value)

**let <variableName> = <value>;**

let <variableName> = <different-value>; --x> ERROR

**<variableName> = <different-value>;**

**NOTE**: A variable defined with var will have global scope (may cause error). Variable defined with let with have block scope.

1. **Create a Variable: const**

The const keyword defines the value of a variable to be constant. if we attempt to change, there will be a TypeError.

We MUST assign a value to const variable when declared. If not, we’ll get SyntaxError

**const <variableName> = <value>;**

<variableName> = <different-value>; //ERROR

1. **Variable Operator**

+=, -=, \*=, /=

++, -- (also accounts for before/after like C)

- To output the type of the variable:

**typeof <variableName>**