**JAVASCRIPT**

**Variables**

A variable is a container for a value, like a number we might use in a sum, or a string that we might use as part of a sentence.

[**Declaring a variable**](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Variables#declaring_a_variable)

To use a variable, you've first got to create it more accurately, we call this declaring the variable. To do this, we type the keyword var or let followed by the name you want to call your variable:

Example:

let myName;

let myAge;

## [Initializing a variable](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Variables#initializing_a_variable)

Once you've declared a variable, you can initialize it with a value. You do this by typing the variable name, followed by an equals sign (=), followed by the value you want to give it.

Example:

let myName = ‘Zuhaib’;

let myAge = 22 ;

## [Updating a variable](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Variables#updating_a_variable)

Once a variable has been initialized with a value, you can change that value by giving it a different value

Example:

let myName = ‘khalifa’;

let myAge = 21 ;

**Variable Naming rules**

* Should not use other characters besides underscore it may cause error
* Not to use underscore at start of the variable names
* Using numbers at start of variables causes error
* Use lower camel case where using lower case for wholes first word then capitalize the next word ex:myName .
* Use appropriate name for the variable you are choosing
* Variables are case sensitive
* Avoid using JavaScript reserved words for variables it will not initialize

Variable Types

1. Numbers
2. Strings
3. Booleans
4. Arrays
5. Objects

**1.Numbers**

We can store numbers in variable either a whole number like 30 or decimal number like 2.544 ,in numbers quotes are not required

Example:

let myAge = 22 ;

2.Strings

Strings ate the text value when we declare a string value we must wrap it in single or double quote marks

Example:

let myName = “Zuhaib” ;

**3.Boolean**

Boolean are true/false value they can have only two values either true or false

Example:

Let test = 5>2;

true

4.Arrays

Array is single object that contains multiple values enclose I square brackets and seperated by commas

Example:

let name = [‘zuhaib’,’khalifa’,’mohammed’];

5.Objects

Object is a structure of code that models a real life object.Using an object literal, you both define and create an object in one statement.An object literal is a list of name:value pairs (like age:50) inside curly braces {}.

Example:

let student = { name : ’zuhaib’ , age : 21, gender : ’male’};

JavaScript is a dynamically types languages we don’t need to specify what data type a variable will contain (number,Strings,arrays.etc)

Constants in Javascript

The value once declared cannot be changed