

~~(JavaScript)~~

JavaScript is a high level language commonly used to create interactive elements and dynamics content on websites.

~~(Ecma Script)~~

EcmaScript is a Standardized Scripting Language Specification used to implement JavaScript, defining the feature and syntax that JavaScript engines must support for interoperability across different platforms and environments.

~~(chapter - 01)~~

~~(Alerts)~~

An alert is a box that pops up to give the user a message. Here's code for an alert that displays the message.

```
alert("Hello World");
```

Alert is a keyword, which have a special meaning for Javascript. It means a display in an alert box the message that follows.

→ some coders write window.alert instead of simply alert this is highly formal. But perfectly correct way to write it & most coders prefer the shorter form.

~~chapter-02~~

~~Variable for string;~~

Variable? is a container that store a value. this is very similar to the containers used to store.

the value of a Javascript variable can be changed during the execution of a program.

Var a=7; → literal of for loop
let a=7; → Declaring Variable

for assignment identifier assignment operator.

A variable is created when you write Var (or var) followed by the name you choose to give it. It take a particular value when you assign it. this is JavaScript Statement that creates the variable name and assign the value any value like string "Mark" to it.

Var name = "Mark";

Coding

writing instructions in a programming language that a computer can understand and execute.

Programming

the process of designing, writing and testing it to perform some specific tasks.

History of JavaScript

JavaScript, developed by Brendan Eich in 1995 at Netscape, revolutionized web development by enabling dynamic and interactive features on web pages. The language formerly known as Mocha, later modified to LiveScript and is now known simply as JavaScript.

The language was quickly adopted by Microsoft for use in Internet Explorer. Due to its simplicity of usage and the fact it was the only client-side scripting language available at the time.

JavaScript quickly gained popularity among web developers.

Note:- that was my choice to call it name.
I could have called it myName, xyz, id... or something else. It's up to me how to name my variable, within limits.
whenever Javascript encounters name Javascript knows that its a variable that refers to "Mark".

e.g:-

```
var name = "Mark";  
name = "Ace";
```

Before I coded the new line If I asked Javascript to print name it printed

Mark

But that was then.

Now if I ask Javascript to Print name

It prints

Ace

A variable can have any number of values but only one at a time and Javascript variables can also change.

Now you can declare a variable in one statement, leaving it undefined. Then you can assign a value to it in a later statement, without deleting it again.

```
var name;  
name = "Ace";
```

JavaScript variable names have no inherent meaning to JavaScript.

```
var thanku = "Thank you!";
alert(thanku);
```

displays not the variable name thanku but the text which it refers "thank you" that same alert, "thank you" displays.

Variables for Numbers

A string (first not being only thing) you can assign a number.

```
Var weight = 150;
```

Having coded the statement above, whenever you write weight in your code Javascript knows you mean 150. You can use this variable in arithmetic calculations.

If you ask Javascript to add 28 to weight (weight + 28)

Javascript remembering that weight refers to 150 will come up with sum 178.

JavaScript can also handle expressions

Made up of nothing but variables. For example

```
var originalNum = 23;  
var numToAdd = 7;  
var newNum = originalNum + numToAdd;
```

A variable can be used in calculating its own new value.

```
var originalNum = 90;  
originalNum = originalNum + 7;
```

If you enclose a number in quotation marks and add 7.

```
var originalNum = "23";  
var newNum = originalNum + 7;
```

It would not work, because Javascript can't sum a string and a number. Javascript interprets "23" as a word, not a number.

Note that any particular variable can be the name of a variable or string variable. From Javascript point of view, there is nothing in a name that denotes "one kind of variable" or another. In fact a variable can start out as one type of a variable, then become another type of variable.

Did you notice what happens when we do this:

```
Var originalNum = 23;  
Var newNum = originalNumber + 7;
```

The statement assigns to the variable newNum the result of Maths operation.

Now

```
Var 1stposition = "Alji";
```

... is illegal / A variable can't begin with a number.

But you can include number in variable..

```
Var position1st = "apl1";
```

... is legal

~~Chapter-04~~

~~Variable Names legal and illegal.~~

You've already learned those rule about naming a variable. You can't enclose it in Quotation marks. the name can't be a number or start with a number. It can't be a JavaScript keywords.

→ Here are the rest of rule:

- 1) A variable name can't contain any space.

- 2) only contain letters, numbers, dollar sign, and _ unless otherwise specified
- 3) Javascript reserved words cannot be used as a variable name.
- 4) Javascript are case sensitive.
e.g. Tay and tay are different variables.