JavaScript [.js]

- Javascript is a Scripting or programming language that allows you to implement complex feacture on web pages.

- Javascript is a scripting lanaguage that enables you to create dynamically updating content multimedia, animated images, & pretty much everything else.
- Javascript is dynamically-typed language

* Javascript Console use :- REPL

Read - Evaluate - Print - Loop
① ② ③ ④

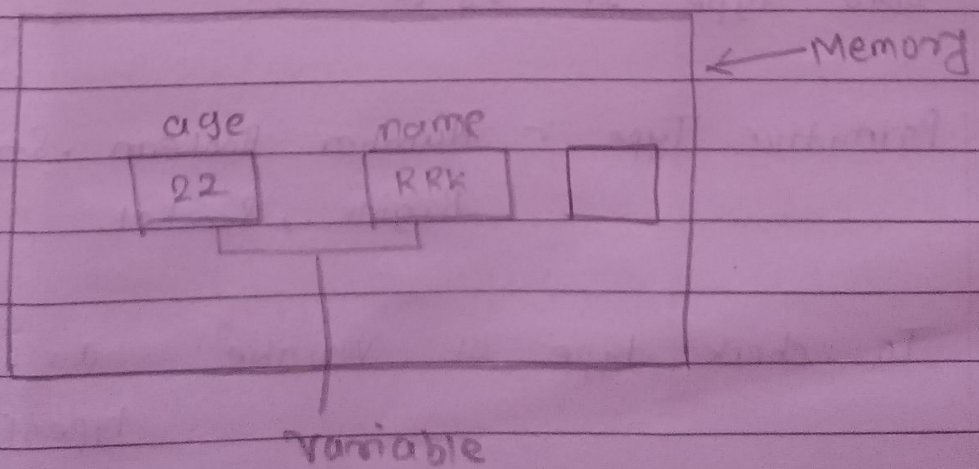
Console Code is temporary

* What is Variable :-

A variable is a ~~rea~~ area where we can store data.

OR

A Variable is a simply the name of the Storage location.



* Difference Between Var, let & Const

Var	let	Const
The scope of a var Variable is Functional or global scope	The scope of a let variable is block scope.	The scope of a Const variable is a block scope.
it can be update & de-declared in the same scope.	it can be updated but it cannot be re-declared in same scope	it can neither be update or re-declared in any scope.
it can be ~~affers~~ declared without intalization.	it can be declared without intalization	it cannot be declared without intalization.
these variable are hoisted	these variable are hosted but stay in the temporal dead zone until intalization	—||—

* Data Type In JS :-

Primitive Type :- Number, Boolean, String, Undefined, Null, Bigint, Symbol.

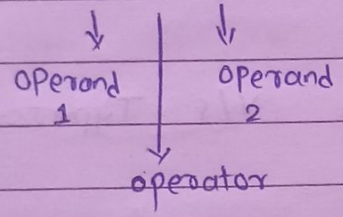
To check type of variable: a = 2;
typeof (a);

Number in JS :	Boolean	String
• +14 & • -14 • Integer (45, -50) • Float : (4.6, -5.9)	true or false	"a", "abc", 'abc'

* Operation in Javascript :-

1] +, −, *, /, %, **, ++, -- ⟶ Arithmatic operator

e.g a + b



2] =, +=, −=, *=, /=, %=, **= ⟶ Assignment operat

3] ==, >, >=, <, <=, !=, ?, !==, === → Comparison opera

== : equal to value

=== : equal value & equal type

4] Logical operator : &&, ||, !

5] Bitwise operator : &, |, ^, <<, >>, >>>

* NaN in JS :

The NaN global property is a value represent Not-A-Number.

0/0 , NaN-1 , NaN * 1 , NaN + NaN

Operator Precendence :

()	**	*, /, %	+ -
1]	2]	3]	4]

e.g : (0+1) * 3

Identifier :

All javascript variable must be identified with unique names.

* Difference betN javascript V/s Typescript

JavaScript	Typescript
1] Interpreted Lonaguage	1] Compiled lonaguage
2] error to get enccountered during run-time.	2] error to get encountered during compile-time.
3] The learning curve is lower.	3] The learning curve is higher.
4] Platefor independent	4] Use existing package.

* Difference betN null & undefined

null	undefined
① The null value represent the intensional absece of any object value.	① A variable that has not been assigned a value is of type undefined.
② to be explicitly assigned	
③ type is object	③ type is undefined
④ equal to 0	④ equal to NaN