

Non primitive Data types

- ① Array
- ② Object
- ③ Functions

stored as
a reference

Array → collection of data
(if stored based on indexes)

Diagram illustrating an array structure with 5 elements (A, B, C, D, E) and their corresponding indices (0, 1, 2, 3, 4). Element C is highlighted at index 2.

string

1	2	3	4	5
0	1	2	3	4

number

Diagram illustrating a memory layout with four slots:

1	prem	4	22-33
---	------	---	-------

Below the slots are indices 0, 1, 2, and 3.

mixed of
data types

Var Marks = $[40, 70, 80, 90, 100]$

Read / Console.log(Marks[2]) → 80

Write / Marks[2] = 60

up

console.log (marks[2]) → 60

~~Delete~~

~~delete~~ marks[2]

[40, 70, Empty, 90, 100]

↓
undefined

marks[2] → undefined.

var fruits = ["Apple", "Banana"]

fruits.push("Mango")

fruits.pop()

fruits.shift()

[~~"A"~~, "B", ~~"M"~~]

["B"]

fruits.unshift("papaya")

["P", "B"]

splice() ~~vs~~ slice() → task

var amount = [100, 2000, 1000, 1, 2]
print only ≤ 100
↓
[100, 1, 2]
↓
filter()

Objects → Collection / Combination
of key-value pair.

var address = {
 address line 1 : "Door 1"
 address line 2 : "Street"
 pin code : "560031"
 city : "Bangalore"
}

}

key should always be
string

↓
string
number
function
Array

Object
Boolean

var user = {

name : "prom",

age : 26,

phone : 224433,

location : "Banglore",

address : {

a1 : "____",

a2 : "____",

pincode : "____",

}

Marks : [100, 200, 10, 20],

Greet : function () {

return "Hey Lam fn"

}

}

Object important

```
var user = {  
  name: "prem"  
}
```

console.log(user.name) ⇒ "prem"

user.phone = 92345678

update →

```
user = {
```

```
  name: "prem",
```

```
  phone: 92345678  
}
```

way 1: console.log(user.phone) ⇒ 92345678

↓ obj ↓ key

way 2: log(user["phone"]) ⇒

delete: delete obj.phone.

```
log(user) ⇒ user = {  
  name: "prem"  
}
```

functions

↳ Group of code which we can reuse / maintainability.

```
function multiple ( ) {  
    _____  
    _____  
    _____  
    _____  
}
```

} Creation

multiple () } Execution

```
function multiple (a, b, c) {
```

result = a + b + c

} return result

multiple (2, 3, 4) → 9

multiple (0, 20, 30) → // 60

↓
arguments

↳ Normal function.

Function
Expression

```
Var multiple = function(a, b, c) {  
    result = a + b + c  
    return result.  
}
```

multiple(a, 2, 3) ⇒ 46

(114)

function (a, b, c) {

result = a + b + c

return result

} (1, 2, 3) => // 6

function fn1(args) {

console.log(args)

}

fn1(1, 2, 3, 4)

function f(a, ~~b, c~~) { c = 0

return a + b + c

}

1 + 2 + unde

f(1, 2)

↓
Error.

functions $f(a, b, \underline{c} = 0) \{$

}

arrow functions

↳ syntax sugar.

Var multiple = (a, b) => a+b

var multiple = (a, b) => {

return result

}

args won't work in arrow functions