

05_08 - Arrays - 1

Friday, 5 August 2022 8:09 PM

Why? 2022

1st

DSA

DSA
Arrays

1990's

tech bubble

90's

IBM

Calculator

HDD → kbs
RAM → kbs

Microsoft

Asp.net

.net
Web forms

html

Css

Mukesh

Us

Static

Newspaper

Javascript dynamic

US / Europe / Asia

Data

Youtube
tiktok
facebook
insta

Savings
Payment for busi

Payment

Postm

Payment for business

Data

1 sec

1m 1ms

10+

Exed

750+

1k

loan

> 750

millions

Data

HDFC

loan

2020 2021

loans

80% Internet on
Unacademy

750+

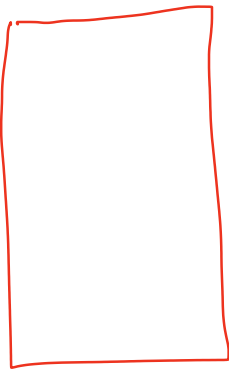
Created { millions }

↓
> { 2.5secs } + { secs }

fetch data

{
↓ time
x
↓ efficient
↓ memory
}

Good data → easily



Store good / Particular data

DSA

Data Structures
& Algorithms

~~1. Arrays~~

2. Stacks / Queues

3. Heaps

4. Trees

5. Maps

6. Linked list

var a = 2;

{ Arrays } ⇒ C / C++ / Java

1 2 3 4 5

arr.				
1	2	3	4	5
0	1	2	3	4

② } memory
2
a1e

key / index
0

arr[3] ⇒ 4
↓ ↓
array index
name

Abhishek

Invitation

Jitendra

"Hey Jitendra, you are invited!"

Vivekananda
Rahul
Sudhakar
Shilpi

function greet()

{

}

greet()

JS Arrays-1.js > ...

let friend1 = "Jitendra";
let friend2 = "Sudhanshu";
let friend3 = "Shilpi";
let friend4 = "Rahul";
let friend5 = "Vivekanand";
//100

friend1 2 3 4 5

J S Sh R V

~~friendName = Jitendra~~

function greet(friendName){
let msg = `Hey \${friendName}, you are invited!`;
return msg;
}

console.log(greet(friend1));
console.log(greet(friend2));
console.log(greet(friend3));
console.log(greet(friend4));
console.log(greet(friend5));

greet line

greet(Jitendra)

String } - "Ranjan"

number } - 99

boolean } - true

Ranjan 99 true

String number boolean

Yes

C/C++
Java

// 2. Constructal way => new keyword will be used

var newArr = new Array(); // new Array() new Array(3)
console.log(newArr.length);
console.log(newArr)
// newArr[0] = "hello";
// newArr[1] = "hello1";
// newArr[2] = "hello2";
newArr[3] = "hello3";
//newArr[4] = "hello4";
console.log(newArr)
console.log(newArr[3].length) // 6

"abc".length
3

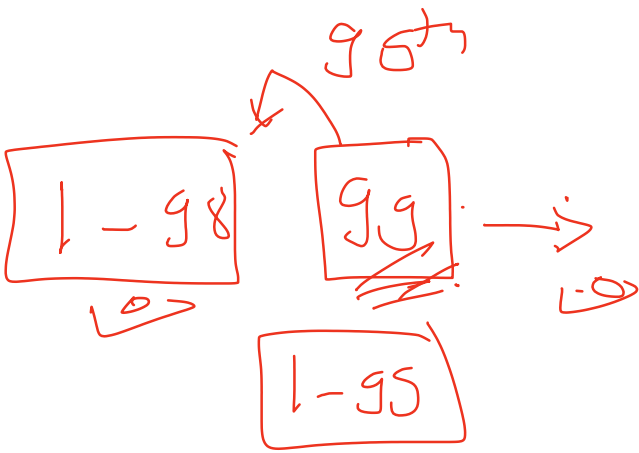
0 1 2 3
Empty hello3
newArr[3].length
6

newArr

10

5

X X



1001