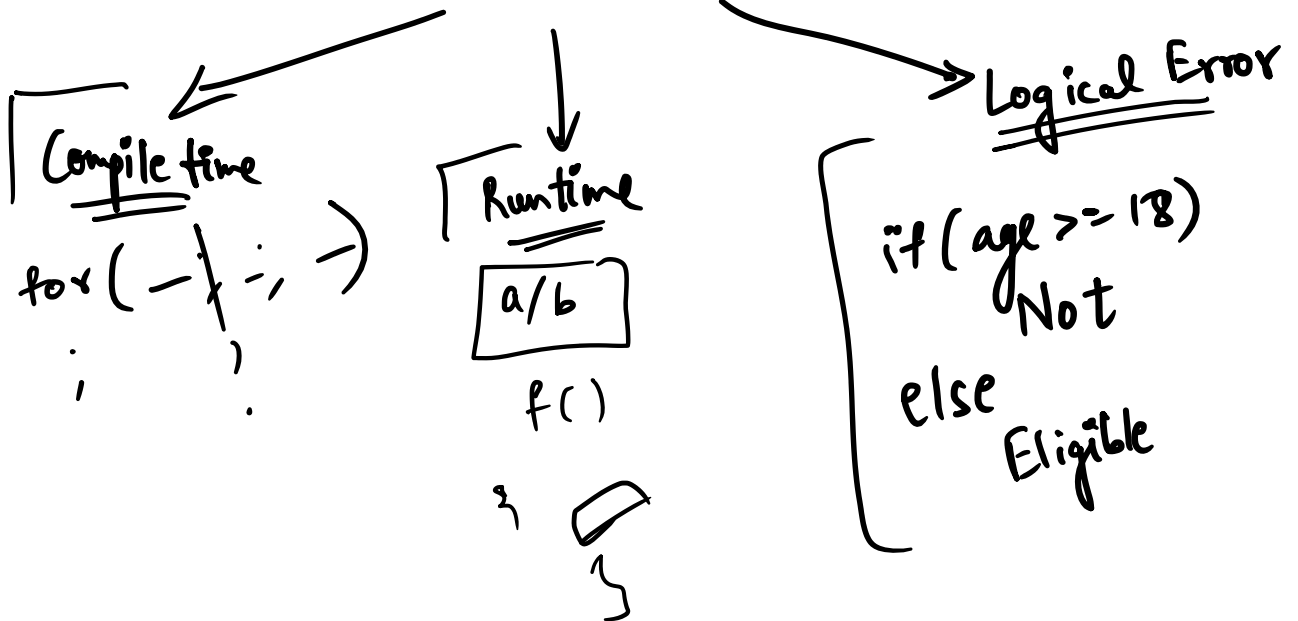


Errors



Map <key, value>
 (unique)

Jersey No.	Player
10	Messi
7	Ronaldo xyz
11	Neymar
12	Neymar
20	xyz

<key, value>

	1	2	3	4
A	A1	A2	A3	A4

Contact Book
 Phone No. → key
 Name → value

(20, xyz)

A	A1	A2	A3	A4
B	B1	B2		
C			C3	
D				

key
token → value

CRUD

C →

R →

U/I →

D →

$O(1)$

$O(n)$

["occurrences", "frequency", "count"]

(Map vs Obj) → ob = { } : —

obj["lo"] = —

obj["o"] = —

"hello world" → [1, 3]

a A b A a c → [A, 2]
 ↓ ↓
 97 65

"hello world"

c = l, count = 3

(key) character	(value) count
h	1
e	1
l	3
o	2
'	1
l	1
w	1
r	1
d	1

Array Destructuring

arr = [10, 20, 30, 40]

a = arr[0]

b = arr[1]

c = [2]

d = [3]

[a, b, c, d] = [10, 20, 30, 40]

[h, 1] ←

[l, 3]

for of
for in

[0, 2]

a-z } 26

A-Z } 26

0-9 } 10

. \$ # } 10

72

O(1)

Map
26
a → 102
b → 3000
d → x72

Set <key> unique

[unique, distinct, duplicate]

[10, 2, 5, 2, 3, 3] → 4

10, 2, 5, 3 → 4

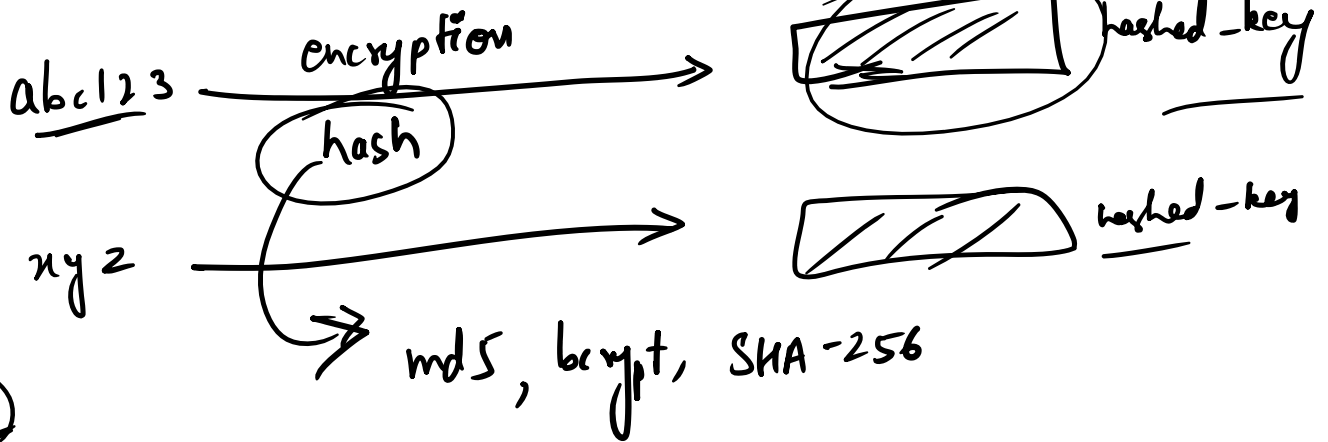
C →
R →
U → add()

Voting

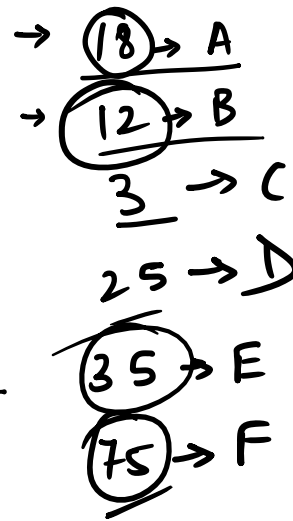
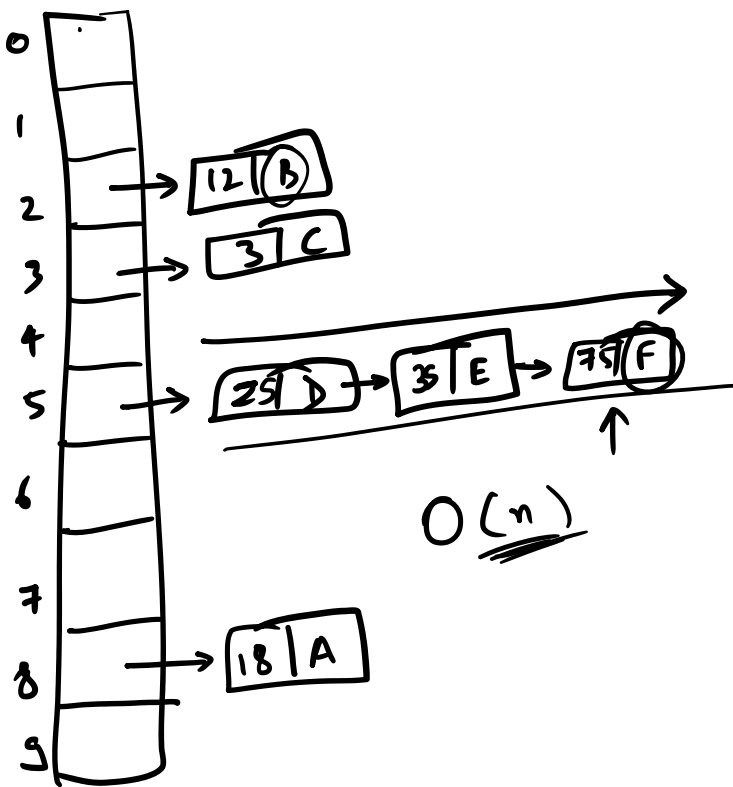
||||

A, B, C,
D

Hashing



$O(1)$



hash(x)
{
return x % 10
}

Hash Collision

arr[idv]
→ $O(1)$