Hashmap

→ Primitives

→ Array

→ Array List

→ String

→ Hashmap

↳ Collection of key-Value

Staing   Integer
Name — Marks

	key	Value
	Tammay	90
	Manish	95	→ Entry
	Akash	100

	Add	Get (Search)	Remove	
Array	O(1)	O(n)	O(1)	O(n)
ArrayList	O(1)	O(n)	O(1)	O(n)
Hashmap	O(1)	O(1)	O(1)	

Note   all the keys are unique

Order is not maintained in HM

map. entaySet()

→ Collection of Entries in iterable manner

map. keySet()

→ Collection of keys in iterable manner

Ques. Max frequency → a

a	b	c	b	d	c	a	a

①
ans = 'a'
max = 23

coont = 4

$a \rightarrow n$
$b \rightarrow n-1$
$c \rightarrow n-2$
$b \rightarrow n-3$

$\Rightarrow O(n^2)$

② Sort

a	a	a	b	b	c	c	d

↓
$(n\log n)$ +   n $\Rightarrow O(n\log n)$

| a | b | c | b | d | c | a | a |

↑

Hashmap

ans = 'a'

max ~~∅~~ 3

Character	Integer
a	~~+~~ ~~2~~ 3
b	~~+~~ 2
c	~~+~~ 2
d	1