

Hash maps

↳ Collection of
key and Value
pair

HashMap

key	Value
Tanmay	80 90
Alam	90
Shubham	100
Kunal	95
Abdul	85

Entry

Tanmay, 80

Shubham 100

Kunal 95

Alam 90

Abdul, 85

Name - marks

String Integer

Search

Add

Get

Remove

Array

$O(1)$

$O(n)$

$O(1)$

ArrayList

$O(1)$

$O(n)$

$O(1)$

LL

$O(1)$

$O(n)$

$O(n)$

HashMap

$O(1)$

$O(1)$

$O(1)$

[80 | 90 | 100 | 95 | 85]

Note

Order is not maintained
in hash map / hash set

hashmap has a lot of Entries

map.entrySet()

↳ Collection of Entries in iterable manner

for (Map.Entry <S, I> entry : map.entrySet())
{

}

Ques Find char with max frequency
"Newton School" $O(n^2)$

→ 0 3

Char	freq		
n	4	2	1
e	1	1	1
w	1	1	1
t	1	1	1
o	1	1	1
	1 3		