

ArrayList, Vector

Arrays.sort(arr) // Natural Order -> Comparabale  
Arrays.sort(arr,comparator) //

hashset

Linkedhashset

Treeset

HashTable -> Data Structure

slots

0

1

2

3

4

5

6

7

8

9

bucket

121 - Anil

141-Mukesh

152 - Suresh

132 - Ram

132 - Sham

0X-201

0X-301

0X-501

0X-402

0X-603

int hashfunction(){  
int hashvalue = rollno \* 3  
return hashValue  
}  
  
slot = hashValue % noofslots  
  
hv= 121\*3 = 363  
slot = 363 % 10 = 3  
  
hv = 132 \* 3 = 396  
slot = 396%10 = 6  
  
hv = 141 \* 3 = 423  
slot = 423%10 = 3

LoadFactor = no of elements / no of slots  
= 5 / 10 = 0.5  
= 10 /10 = 1  
= 15 / 10 = 1.5

1. Open Addressing (LF<=1)
2. Seperate Chaining (LF > 1)

hashCode()

- adrress of an object is used to generate the hashcode

Set<K,null>  
HashSet<K,null>  
LinkedHashSet<K,null>  
TreeSet<K,null>

Map<K,V>  
HashMap<K,V>  
LinkedHashMap<K,V>  
TreeMap<K,V>

Interface -> Java 8 onwards