

```
Map<String, String> map = new HashMap<>();
map.put("A", "1");
map.put("B", "1");
map.put("C", "1");
map.put("D", "2");
// resultMap : 1=[A,B,C], 2=[D]

//map.entrySet().stream().collect(Collectors.toMap(m->,
null));
System.out.println(map);
Map<String, String> newMap = new HashMap<>();
for(Map.Entry<String, String> entry : map.entrySet()) {
    if(newMap.containsKey(entry.getKey())) {
        newMap.put(entry.getKey(),
            newMap.get(entry.getKey()) + entry.getValue());
    } else {
        newMap.put(entry.getKey(), entry.getValue());
    }
}
System.out.println(newMap);
```

entry  $\rightarrow$   $\begin{matrix} K & V \\ A & 1 \end{matrix}$   
 $\textcircled{B} \rightarrow \textcircled{1} \rightarrow C \rightarrow 1, D \rightarrow 2$

$\text{nm.get}(1) \rightarrow (A+B)$  put(1, ABC)

newMap put(1, AB)

Arrange non zero left side and zero right side

```
List<Integer> list = Arrays.asList(10,23,0,4,5,0,34,0,0);
//output- 10,23,4,5,34,0,0,0,0
ArrayList<Integer> newList = new ArrayList<>();
int ctr=0;
for(Integer value: list) {
    if(value !=0) {
        newList.add(value);
    } else {
        ctr++;
    }
}
while(ctr-->=0) {
    newList.add(0);
}
System.out.println(newList);
```

Output  $\Rightarrow$

[10, 23, 4, 5, 34, 0, 0, 0, 0]

④ input  $\Rightarrow$  "welcome"  $\rightarrow$  list of object  
output  $\Rightarrow$  come

```
List<String> list1 = Arrays.asList("welcome");

//output- come
for(String s:list1) {
    String value = s.substring(3,7);
    System.out.println(value);
}
```

⑤ Find the 3rd highest max element in the list.

```
List<Integer> list2 = Arrays.asList(10,20,30,62,58);
System.out.println(list2);
List<Integer> list3 = list2.stream().limit(3).collect(Collectors.toList());
System.out.println(list3);
//62, 58, 30,20,10

List<Integer> reverseList = list2.stream().sorted(Collections.reverseOrder()).collect(Collectors.toList());
System.out.println(reverseList);
List<Integer> skipList = list2.stream().sorted(Collections.reverseOrder()).skip(2).collect(Collectors.toList());
System.out.println(skipList);
System.out.println(skipList.get(0));
Integer thirdMax =
list2.stream().sorted(Collections.reverseOrder()).skip(2).max(Comparator.comparing(Integer::valueOf)).get();
System.out.println(thirdMax);
```

map  $\rightarrow$   $\begin{matrix} K & V & K & V & K & V & K & V \\ A & 1 & B & 1 & C & 1 & D & 2 \end{matrix}$  entry  $e \rightarrow 0-1$

output  $\rightarrow 1 \rightarrow ABC, 0 \rightarrow 2$

newMap  $\rightarrow$   $\begin{matrix} K & V \\ 1 & A+B+ABC, 2 \rightarrow D \end{matrix}$

$1 \rightarrow \textcircled{A}B$   
 $1 \rightarrow \textcircled{B}$   
(1- AB)

$\begin{matrix} S+I \Rightarrow S \\ S+S \Rightarrow S \\ I+S \Rightarrow S \\ I+I \Rightarrow I \end{matrix}$

$S \Rightarrow \text{String}$   
 $I \Rightarrow \text{Integer}$