



$O(n)$

[2, 3, 1, 4, 5, 3, 7, 1, 2, 4, 5]
→ [2, 1, 3, 3, 4, 3, 7, 2, 2, 7, 11, 15, 3]

```
for(int i=0; i< arr1.length; i++) {  
    → if(map.containsKey(arr1[i])) {  
        map.put(arr1[i], map.get(arr1[i]) + 1);  
    } else {  
        map.put(arr1[i], 1);  
    }  
}
```

[2, 3, 3, 4, 7, 7]

```
ArrayList<Integer> ll= new ArrayList<>();  
for(int i=0; i< arr2.length; i++) {  
    if(map.containsKey(arr2[i]) && map.get(arr2[i]) > 0) {  
        ll.add(arr2[i]);  
        map.put(arr2[i], map.get(arr2[i]) - 1);  
    }  
}
```

2	0
3	0
1	1
4	1
5	2
7	0

```
for(int i=0; i< arr.length; i++){  
    if (map.containsKey(arr[i] - 1)) {  
        map.put(arr[i], false);  
    } else {  
        map.put(arr[i], true);  
    }  
    if (map.containsKey(arr[i] + 1)) {  
        map.put(arr[i]+1, false);  
    }  
}
```

ans = 5

1 8 9 10

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

3 5

In boolean

2	F
3	F
7	T
4	F
1	T
8	F
5	F
15	T
13	F
16	F
1	F

1, 2, 3, 4, 5, 7, 8, 9, 12, 16

5 → 5

7, 8, 9 → 3

12, 16 → 2