

Ques: Segregate 0s and 1s

arr = { 1, 0, 0, 1, 1, 1, 0, 1, 0, 1, 1, 0 }

M-1: Count the no. of zeroes & ones

no0 = 5, no1 = 7

```
for (int i = 0; i < no0; i++) {
    | arr[i] = 0;
}
for (int i = no0; i < n; i++) {
    | arr[i] = 1;
}
```



Ques: Segregate 0s and 1s (2-pointer technique)

arr = { 1, 0, 0, 1, 1, 1, 0, 1, 0, 1, 1, 0 }

0 0 0 0 0 1 1 1 1 1 1 1
 j i

Ques: Segregate 0s and 1s

0 0 0 1 0 1 1
 j i

```
while(i < j) {
    if(arr[i] == 0) i++;
    if(arr[j] == 1) j--;
    if(arr[i] == 1 && arr[j] == 0) {
        swap
        i++
        j--
    }
}
```



Ques: Wave Array

Arraylist & Vector in Java

↓
dynamic arrays → growing array 'Collection Framework'

Array ki problem → fixed size

Ques: Adding One

$$\begin{array}{r} 0019 \\ +1 \\ \hline 1880 \end{array}$$

$$\begin{array}{r} 111999 \\ +1 \\ \hline 1000 \end{array}$$

$$\begin{array}{r} 0111299 \\ +1 \\ \hline 1300 \end{array}$$

if(arr[n-1] != 9) arr[n-1]++;

ans = {0, 8, 8, 1}

↓
reverse

ArrayList<Integer> ans = new ArrayList<>();

✱✱ **Ques:** Merge 2 Sorted Arrays in a single big array.

$a =$

2	5	6	9	20
---	---	---	---	----

 $b =$

1	3	4	5	7	8
---	---	---	---	---	---

i j

$c =$

1	2	3	4	5	5	6	7	8	9	20
---	---	---	---	---	---	---	---	---	---	----

k

3 pointer technique



Ques: Merge 2 Sorted Arrays 'Homework'

$a =$

2	5	6	9	20
---	---	---	---	----

 i

$b =$

1	3	4	5	7	8
---	---	---	---	---	---

 j

$c =$

--	--	--	--	--	--	--	--	--	--	--

 k

merge in sorted order



Ques: Sort 0s, 1s and 2s *'Homework'*



THANKYOU

Cuties