

Changing Sequence

0 1 2 3 4 5 6

arr =



o/p = 3



0 1 2 3 4 5 6

arr =

4 3 1 1 2 7 6

2-1  
4-2  
6-1

3-4-1  
1-3-2  
1-1-0

-1 1  
-2 2  
0 2

				↓			
	0	1	2	3	4	5	6
arr =	1	2	4	6	4	3	1

M1

min to do

$$\text{arr}(j) - \text{arr}(i) = 2 - 1 = 1$$

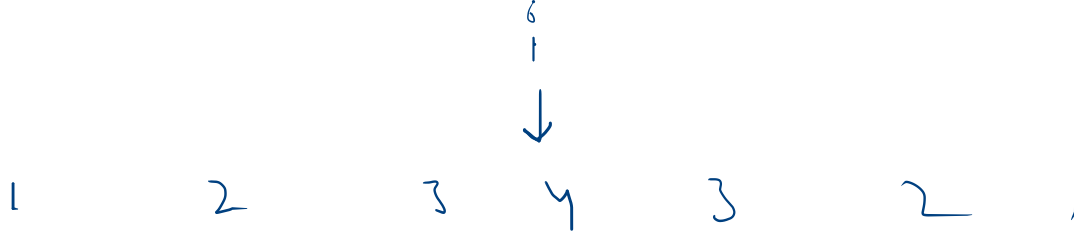
$$4 - 2 = 2$$

$$6 - 4 = 2$$

$$-2 = -ve$$

→ Posi (3)

①



$$\rightarrow \text{arr}[i] < \text{arr}[i+1] \rightarrow i++$$

$$\rightarrow \text{arr}[i] > \text{arr}[i+1]$$

②

3

2

↓  
1

2

3

4

5

$arr[i] > arr[i+1]$

③

1

2

3

4

5

↓

④

5

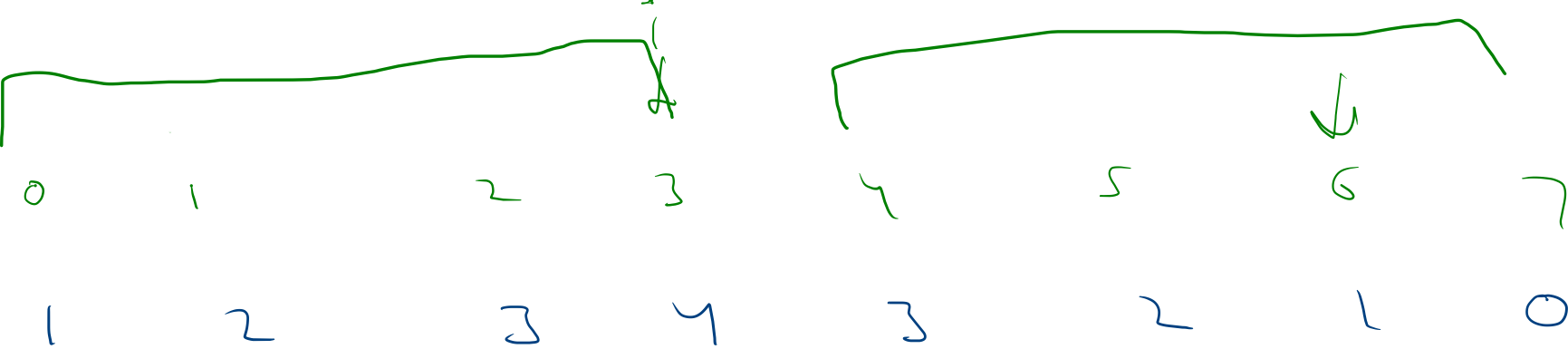
4

3

2

1

↓



```

if ( arr[i] < arr[i+1] ) { // inc
    while (arr[i] < arr[i+1])
        i++
}
else if (arr[i] > arr[i+1]) // dec
    while (arr[i] > arr[i+1])
        i++
}
return i

```

2

3

4

5

6

i  
↓

if (i == n-1) {  
    return -1

} else  
    return i