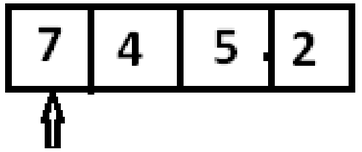
DAY 1

INSERTION SORT

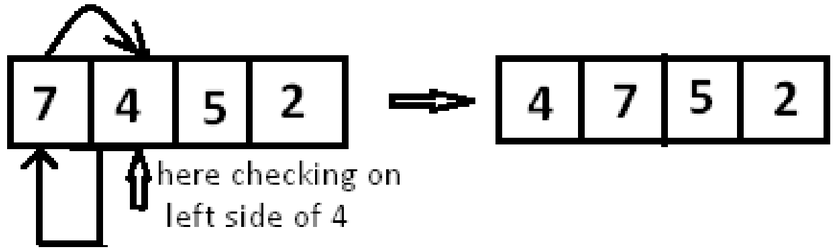
VAISHNAV KRISHNA P

STEP 1.



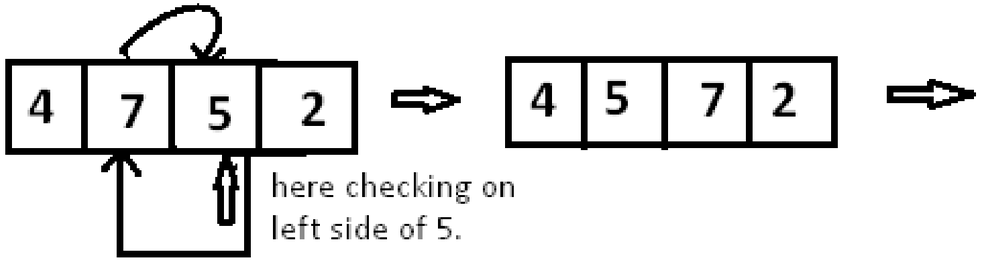
No element on left side of 7,so no change in its position .

STEP 2.



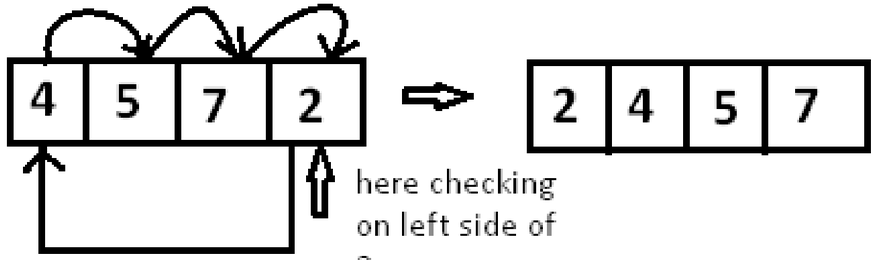
As 7>4 ,therfore 7 will be moved forward and 4 will be moved to 7's position.

STEP 3.



As 7>5,7 will be moved forward,but 4 <5,so no change in position of 4. And 5 will be moved to position of 7.

STEP 4.



As all the element on left side of 2 are greater than 2,so all the elements will be moved forward and 2 will be shifted to position of 4

CODE(PYTHON)

```
def insertion_sort(arr,n):
    for i in range(1,n):
        current = arr[i]
        j = i - 1
        while arr[j] > current and j >= 0:
            arr[j+1] = arr[j]
            j -= 1

        arr[j+1] = current
    return arr
```