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def maxheapify(arr,n,i):
    largest = i
    left = 2 * i + 1
    right = 2 * i + 2
    if left < n and arr[left] > arr[largest]:
        largest = left
    if right < n and arr[right] > arr[largest]:
        largest = right
    if largest != i:
        arr[i],arr[largest] = arr[largest],arr[i]
        heapify(arr,n,largest)

```

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def minheapify(arr,n,i):
    largest = i
    left = 2 * i + 1
    right = 2 * i + 2
    if left < n and arr[left] < arr[largest]:
        largest = left
    if right < n and arr[right] < arr[largest]:
        largest = right
    if largest != i:
        arr[i],arr[largest] = arr[largest],arr[i]
        heapify(arr,n,largest)

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def ascheapsort(arr):
    n = len(arr)
    for i in range(n // 2 - 1, -1, -1):
        maxheapify(arr,n,i)
    for i in range(n - 1, 0, -1):
        arr[i],arr[0] = arr[0],arr[i]

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        maxheapify(arr,i,0)

def desheapsort(arr):
    n = len(arr)
    for i in range(n // 2 - 1,-1, -1):
        minheapify(arr,n,i)
    for i in range(n - 1,0,-1):
        arr[i],arr[0] = arr[0],arr[i]
        minheapify(arr,i,0)
if __name__ == "__main__":
    user_input = input("Enter the Elements of the array to sort separated by spaces : ")
    arr = list(map(int,user_input.split()))
    print("Original Array : ",arr)
    ascheapsort(arr)
    print("Sorted Array in ascending order : ",arr)
    desheapsort(arr)
    print("Sorted Array in ascending order : ",arr)

```

Output :

Enter the Elements of the array to sort separated by spaces : 45 25 36 15 24 89

Original Array : [45, 25, 36, 15, 24, 89]

Sorted Array in ascending order : [15, 24, 25, 36, 45, 89]

Sorted Array in ascending order : [89, 45, 36, 25, 24, 15]