

INSERTION SORT

```
arr=[64,34,25,12,22,11,90]
for i in range(1,len(arr)):
    key=arr[i]
    j=i-1
    while j>=0 and key<arr[j]:
        arr[j+1]=arr[j]
        j-=1
    arr[j+1]=key
print("sorted array is:",arr)
```

Output

```
sorted array is: [11, 12, 22, 25, 34, 64, 90]
```

```
=== Code Execution Successful ===
```

Selection Sort

```
arr=[64,34,25,12,22,11,90]
for i in range(1,len(arr)):
    min_index=i
    for j in range(i+1,len(arr)):
        if arr[min_idx]>arr[j]:
            min_idx=j
    arr[j],arr[min_idx]=arr[min_idx],arr[i]
print("sorted array:")
for i in range(len(arr)):
    print(arr(i))
```



Output

Sorted array:

11

12

22

25

64

=== Code Execution Successful ===

BUBBLE SORT

```
def bubblesort(arr):  
    n=len(arr)  
    for i in range(n):  
        for j in range(0,n-i-1):  
            if arr[j]>arr[j+1]:  
                arr[j],arr[j+1]=arr[j+1],arr[j]  
arr=[64,34,25,12,22,11,90]  
bubblesort(arr)  
print("sorted array is:",arr)
```

Output

sorted array is: [11, 12, 22, 25, 34, 64, 90]

=== Code Execution Successful ===



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