1. Selection Sort:

Program:

```
def selection_sort(arr):
    # Traverse through all array elements
    for i in range(len(arr)):
        # Find the minimum element in remaining unsorted array
        min_idx = i
        for j in range(i + 1, len(arr)):
            if arr[min_idx] > arr[j]:
                min_idx = j

        # Swap the found minimum element with the first element
        arr[i], arr[min_idx] = arr[min_idx], arr[i]

    return arr

# Example usage:
arr = [64, 25, 12, 22, 11]
sorted_arr = selection_sort(arr)
print("Sorted array:", sorted_arr)
```

Output:

```
"C:\Program Files\Python312\python.exe" "C:\Work Space\DAA\DAA COADS.PYTHON\program 73.py"
Sorted array: [11, 12, 22, 25, 64]

Process finished with exit code 0
```

Time complexity:

O(n^2)