



```
1 // Objective: - Program for Selection Sort.
2 #include <stdio.h>
3
4 void swap(int *xp, int *yp) {
5     int temp = *xp;
6     *xp = *yp;
7     *yp = temp;
8 }
9
10 void selectionSort(int arr[], int n) {
11     int i, j, min_idx;
12     for (i = 0; i < n - 1; i++) {
13         min_idx = i;
14         for (j = i + 1; j < n; j++) {
15             if (arr[j] < arr[min_idx]) {
16                 min_idx = j;
17             }
18         }
19         // Only swap if a new minimum was found
20         if (min_idx != i) {
21             swap(&arr[min_idx], &arr[i]);
22         }
23     }
24 }
25
26 void printArray(int arr[], int size) {
27     for (int i = 0; i < size; i++) {
28         printf("%d ", arr[i]);
29     }
30     printf("\n");
31 }
32
33 int main() {
34     int arr[] = {13, 41, 56, 2, 67};
35     int n = sizeof(arr) / sizeof(arr[0]);
36     selectionSort(arr, n);
37     printf("Sorted array: \n");
38     printArray(arr, n);
39     return 0;
40 }
41
42
43 // Output :
44
45 // Sorted array:
46 // 2 13 41 56 67
```