

# Code:-

```
1  #include<stdio.h>
2  void selectionSort(int arr[], int size);
3
4
5  int main(){
6
7      int arr[] = {30,10,50,20,40};
8      int size = sizeof(arr)/sizeof(arr[0]);
9
10     printf("\nBefore Sorting: \n");
11     for (int i = 0; i < size; i++) {
12         printf("%d ", arr[i]);
13     }
14
15     selectionSort(arr, size);
16
17     printf("\n\nAfter Sorting: \n");
18     for (int i = 0; i < size; i++) {
19         printf("%d ", arr[i]);
20     }
21
22
23     return 0;
24 }
25
26
27 void selectionSort(int arr[], int size){
28     for(int i = 0; i < size - 1; i++){
29         int min_idx = i;
30         int min_Val = arr[i];
31         for (int j = i + 1; j < size; j++)
32         {
33
34             if(arr[j] < min_Val){
35                 min_idx = j;
36                 min_Val = arr[j];
37             }
38         }
39         arr[min_idx] = arr[i];
40         arr[i] = min_Val;
41
42
43
44     }
45
46 }
```

# Output:-

```
PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER 2  
> gcc insertionSort.c -o insertionSort && ./insertionSort  
>  
> ^C
```

```
admin@DESKTOP-72HUHIM MINGW64 /e/AOA (main)  
•$ gcc insertionSort.c -o insertionSort
```

```
admin@DESKTOP-72HUHIM MINGW64 /e/AOA (main)  
•$ ./insertionSort.exe
```

```
Before Sorting:  
30 10 50 20 40
```

```
After Sorting:  
10 20 30 40 50
```

```
admin@DESKTOP-72HUHIM MINGW64 /e/AOA (main)  
•$
```