

SELECTION SORT

```
#include <stdio.h>

void SelSort(int arr[],int n);

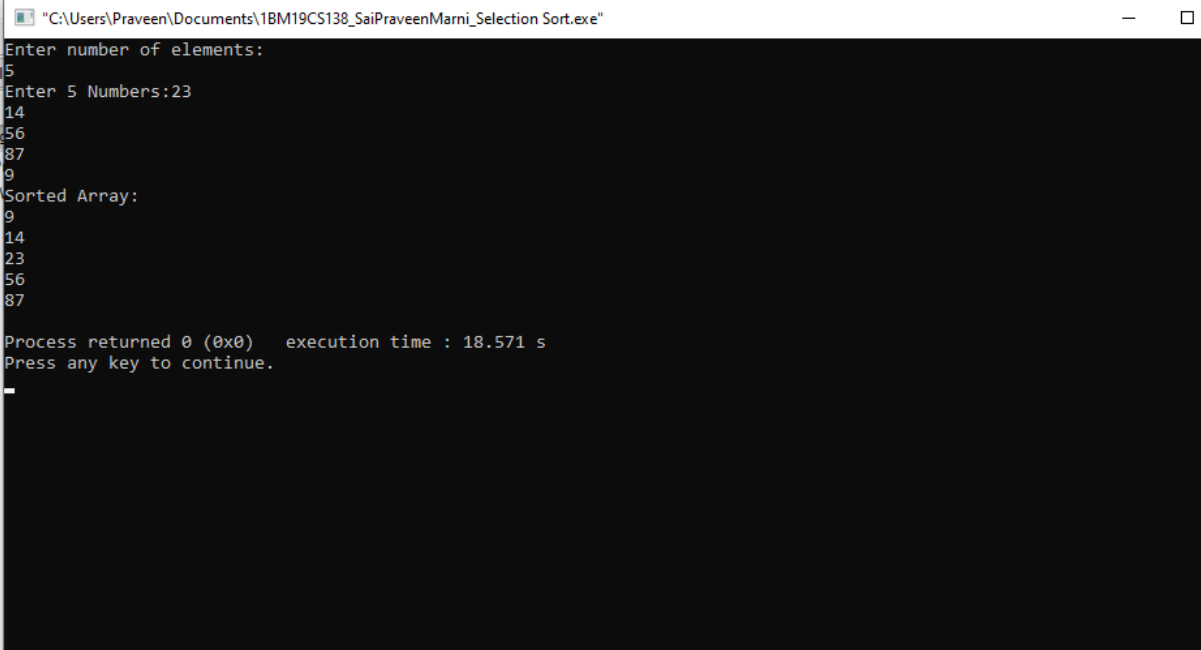
int main()
{
    int arr[100], n,i;
    printf("Enter number of elements:\n");
    scanf("%d", &n);
    printf("Enter %d Numbers:", n);
    for(i = 0; i < n; i++)
        scanf("%d", &arr[i]);
    SelSort(arr,n);
    return 0;
}

void SelSort(int arr[], int n)
{
    int i, j, pos, swap;
    for(i = 0; i < (n - 1); i++)
    {
        pos=i;
        for(j = i + 1; j < n; j++)
        {
            if(arr[pos]>arr[j])
                pos=j;
        }
        if(pos!= i)
        {
            swap=arr[i];
            arr[i]=arr[pos];
            arr[pos]=swap;
        }
    }
}
```

SELECTION SORT

```
printf("Sorted Array:\n");  
for(i = 0; i < n; i++)  
printf("%d\n", arr[i]);  
}
```

OUTPUT:



The screenshot shows a Windows command prompt window titled "C:\Users\Praveen\Documents\1BM19CS138_SaiPraveenMarni_Selection Sort.exe". The program prompts the user to "Enter number of elements:" and the user enters "5". It then prompts "Enter 5 Numbers:" and the user enters "23", "14", "56", "87", and "9" on separate lines. The program then displays "Sorted Array:" followed by the sorted numbers "9", "14", "23", "56", and "87" on separate lines. At the bottom, it shows "Process returned 0 (0x0) execution time : 18.571 s" and "Press any key to continue." with a cursor on a new line.

```
"C:\Users\Praveen\Documents\1BM19CS138_SaiPraveenMarni_Selection Sort.exe"  
Enter number of elements:  
5  
Enter 5 Numbers:23  
14  
56  
87  
9  
Sorted Array:  
9  
14  
23  
56  
87  
Process returned 0 (0x0) execution time : 18.571 s  
Press any key to continue.  
-
```