

//Created By Ritwik Chandra Pandey on 6/11/21  
//Selection Sort: : Smallest Element Method

```
#include<stdio.h>
void main() {
    int a[20], i, n, j, small, index;
    printf("Enter value of n : ");
    scanf("%d", &n);
    for (i=0;i<n;i++) {
        printf("Enter element for a[%d] : ", i);
        scanf("%d", &a[i]);
    }
    printf("Before sorting the elements in the array are\n");
    for (i=0;i<n;i++) {
        printf("Value of a[%d] = %d\n", i, a[i]);
    }
    for (i=0;i<n-1;i++) {
        index = i;
        for (j=i+1;j<n;j++) {
            if (a[j]<a[index]) {
                index = j;
            }
        }
        small = a[index];
        a[index] = a[i];
        a[i] = small;
    }
    printf("After sorting the elements in the array are\n");
    for (i=0;i<n;i++) {
        printf("Value of a[%d] = %d\n", i, a[i]);
    }
}
```