//Created By Ritwik Chandra Pandey on 6/11/21
//Selection Sort: : Largest Element Method
/*The working procedure for selection sort largest element method is as follows:

1. Let us consider an array of **n** elements (i.e., **a[n]**) to be sorted.
2. In the first step, the **largest element** in the list is searched. Once the largest element is found, it is exchanged with the element which is placed at the **last position**. This completes the first pass.
3. In the next step, it searches for the **second largest element** in the list and it is interchanged with the element placed at **second largest position**. This is done in second pass.
4. This process is repeated for **n - 1** passes to sort all the elements. */

```
#include<stdio.h>
void main() {
	int a[20], i, n, j, large, 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=n-1;i>=1;i--) {

		index = i;
		for (j=i;j>=0;j-- ) {
			if (a[j]>a[index]) {

				index = j;
			}
		}
		large=a[index];
		a[index] = a[i];
		a[i] = large;
```

```
        }
        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]);
        }
}
```