Program:

```c
#include <stdio.h>
#include <stdlib.h>
int smallest(int arr[], int k, int length);
void selection_sort(int arr[], int length);
void main()
{
    int arr[10], i, length;
    printf("\n Enter length of array array: ");
    scanf("%d", &length);
    printf("\n Enter the elements of the array: ");
    for (i = 0; i < length; i++)
    {
        scanf("%d", &arr[i]);
    }
    selection_sort(arr, length);
    printf("\n The sorted array is: \n");
    for (i = 0; i < length; i++)
        printf(" %d\t", arr[i]);
    printf("\n");
}
int smallest(int arr[], int k, int length)
{
    int pos = k, small = arr[k],temp;
    while(k<length)
    {
        if (arr[k] < small)
        {
            small = arr[k];
            temp = arr[k];
            arr[k] = arr[pos];
            arr[pos] = temp;
        }
        k++;
    }
    return pos;
}
void selection_sort(int arr[], int length)
{
    int k,pos,temp;
    for (k = 0; k < length; k++)
    {
        pos = smallest(arr, k, length);
    }
}
```

Output:

dl0417@itadmin: ~/AtharvSYIT66

```
dl0417@itadmin:~/AtharvSYIT66$ ./a.out

 Enter length of array array: 6

 Enter the elements of the array: 2
4
9
10
6
23

 The sorted array is:
 2       4       6       9       10      23
dl0417@itadmin:~/AtharvSYIT66$
```