```
 1 #include <stdio.h>
 2 #include <stdlib.h>
 3 |
 4
 5 int smallest(int arr[], int k, int n);
 6
 7 void selection_sort(int arr[], int n);
 8 void main(int argc, char *argv[])
 9 {
10 int arr[10], i, n;
11 printf("\n Enter the number of elements in the array: ");
12 scanf("%d", &n);
13 printf("\n Enter the elements of the array: ");
14 for(i=0;i<n;i++) {   scanf("%d", &arr[i]); }
15 selection_sort(arr, n);
16 printf("\n The sorted array is: \n");
17 for(i=0;i<n;i++) printf(" %d\t", arr[i]);
18 }
19 int smallest(int arr[], int k, int n)
20 { int pos = k, small=arr[k], i;
21 for(i=k+1;i<n;i++)
22 {
23 if(arr[i]< small)
24 {    small = arr[i];    pos = i;  }
25  }
26 return pos;
27 }
28 void selection_sort(int arr[],int n)
29 {
30 int k,
31 pos,
32 temp;
33 for(k=0;k<n;k++)
34 {
35 pos = smallest(arr, k, n);
36 temp = arr[k];
37 arr[k] = arr[pos];
38 arr[pos] = temp;
39 }
40 }
41
42
```

```
dl0411@itadmin:~$ ./a.out

 Enter the number of elements in the array: 6

 Enter the elements of the array: 66 11 22 44 1 55

 The sorted array is:
 1       11      22      44      55      66      dl0411@itadmin:~$ ▮
```