

```

1  #include<stdio.h>
2
3  int findMin(int *A,int start,int end)
4  {
5      int i;
6      int min=A[start];
7      int minIndex;
8
9      for(i=start+1;i<=end;i++)
10     {
11         if(A[i]<min)
12         {
13             min=A[i];
14             minIndex=i;
15         }
16
17     }
18     return minIndex;
19 }
20
21 void swap(int *A,int a,int b)
22 {
23     int temp;
24     temp=A[a];
25     A[a]=A[b];
26     A[b]=temp;
27 }
28
29 void SelectionSort(int *A,int n)
30 {
31     //select the min and place it at position i;
32
33     int i=0;
34     for(i=0;i<n;i++)
35     {
36         int index=findMin(A,i,n);
37         swap(A,index,i);
38     }
39 }
40
41 void main()
42 {
43     int A[]={5,4,6,1,9,7,0,2,10,8,3};
44     int size=sizeof(A)/sizeof(int);
45     int i=0;
46     printf("*****Input Array*****\n\n");
47     for (i=0;i<size;i++)
48     {
49         printf("%5d",A[i]);
50     }
51     SelectionSort(A,size-1);
52     i=0;
53     printf("\n*****Sorted Array*****\n\n");
54     for (i=0;i<size;i++)
55     {
56         printf("%5d",A[i]);
57     }
58 }
59

```