

```

1  // 8.9
2  #include <stdio.h>
3
4  int main(void)
5  {
6      int A[1001], n, i, k, mi, temp;
7
8      // input
9      printf("Enter the number of elements: ");
10     scanf("%d", &n);
11
12     printf("Enter all elements:\n");
13     for(i=0; i < n; ++i){
14         scanf("%d", &A[i] );
15     }
16
17     // selection sort
18     for(i = n-1; i > 0; --i){
19         mi = i;
20         for(k=i-1; k >= 0; --k){
21             if( A[mi] < A[k] ) mi = k;
22         }
23
24         if( mi != i ){ // swapping
25             temp = A[i];
26             A[i] = A[mi];
27             A[mi] = temp;
28         }
29     }
30
31     // output sorted element
32     printf("Sorted Array\n");
33     for(i=0; i < n; ++i) printf("%d ", A[i] );
34     printf("\n");
35
36     return 0;
37 }
38

```