

```
1 #include <iostream>
2
3 using namespace std;
4
5 void insertionSort(int array[], int size) {
6     for (int i = 1; i < size; i++) {
7         int key = array[i];
8         int j = i - 1;
9         while (j >= 0 && array[j] > key) {
10             array[j + 1] = array[j];
11             j--;
12         }
13         array[j + 1] = key;
14     }
15 }
16
17 int main() {
18     int size;
19     std::cout << "Enter the size of the array: ";
20     std::cin >> size;
21     if (size <= 0) {
22         std::cerr << "Invalid array size. Please enter a positive integer." &
23             << std::endl;
24         return 1;
25     }
26     int array[size];
27
28     std::cout << "Enter the elements of the array:" << std::endl;
29     for (int i = 0; i < size; ++i) {
30         std::cout << "Element " << i + 1 << ": ";
31         std::cin >> array[i];
32     }
33
34     insertionSort(array, size);
35     cout << "\nThe sorted array is: ";
36     for (int i = 0; i < size; i++) {
37         cout << array[i] << " ";
38     }
39     return 0;
40 }
```