```cpp
1: //Kalli Bonin and Alexander Dineen
2: //Question 3 - Sorting Three Numbers
3:
4: #include <iostream>
5: #include <cmath>
6: #include <cstdlib>
7: #include <fstream>
8: #include <iomanip>
9:
10: using namespace std;
11:
12: void swap(float & a, float & b)
13: {
14:     float temp = a;
15:     a = b;
16:     b = temp;
17: }
18:
19:
20: bool sort_three_numbers(float & num_1, float & num_2, float & num_3)
21: {
22:     if (num_1 > num_2 && num_2 > num_3)
23:         return true;
24:     else
25:     {
26:         if(num_2 > num_1)
27:             swap(num_2, num_1);
28:         if(num_3 > num_2)
29:             swap(num_3, num_2);
30:         if(num_2 > num_1)
31:             swap(num_2, num_1);
32:         return false;
33:     }
34: }
35:
36: int main()
37: {
38:     cout << "Input three numbers ";
39:     float num_1 = 0, num_2 = 0, num_3 = 0;
40:     cin >> num_1 >> num_2 >> num_3;
41:
42:     bool sorted = sort_three_numbers(num_1, num_2, num_3);
43:
44:     if (sorted)
45:         cout << "Numbers inputted are already sorted" << endl;
46:
47:     cout << num_1 << " > " << num_2 << " > " << num_3 << endl;
48: }
49:
50: /*
```

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51:     Input three numbers 3 8 -1
52:     8 > 3 > -1
53:
54:     ---------------------------------
55:     Process exited after 3.973 seconds with return value 0
56:     Press any key to continue . . .
57:
58: */
59:
60: /*
61:     Input three numbers 0.001 0.1 -0.5
62:     0.1 > 0.001 > -0.5
63:
64:     ---------------------------------
65:     Process exited after 9.775 seconds with return value 0
66:     Press any key to continue . . .
67:
68: */
```