

```
1  #include <iostream>
2  #include <string>
3  #include <vector>
4  #include <algorithm>
5  #include <sstream>
6
7  //using namespace std;
8
9  bool createSet(const std::string &, std::vector<int> &, std::vector<int> &);
10 void display(const std::vector<int> &);
11
12
13 int main() {
14     std::string input;
15     std::vector<int> SetA, SetB;
16
17     // Input a line from console into a string
18     std::getline(std::cin, input);
19
20     if (createSet(input, SetA, SetB)) {
21         sort(SetA.begin(), SetA.end());
22         display(SetA);
23
24         sort(SetB.begin(), SetB.end());
25         display(SetB);
26     }
27     else
28         std::cout << "Error" << std::endl;
29     return 0;
30 }
31
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39
40 ///////////////////////////////////////////////////////////////////
41 // Prints the vector elements separated by a white space.
42 ///////////////////////////////////////////////////////////////////
43
44 void display(const std::vector<int> & V) {
45     for (auto n : V)
46         std::cout << n << " ";
47 }
48
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```

```
59 ///////////////////////////////////////////////////////////////////
60 // Read from a string and create 2 sets of int, Va and Vb.
61 // Returns true that's successful.
62 ///////////////////////////////////////////////////////////////////
63
64 using namespace std;
65
66 bool createSet(const string & input, vector<int> & SetA, vector <int> & SetB) {
67     int n;
68     char c;
69
70     // Create and initialize a stream from a string
71     std::stringstream stream(input);
72
73     // from the stream data can be taken with the >> operator, like for cin
74     while (stream >> c) {
75         if (c == 'a') {
76             stream >> n;
77             SetA.push_back(n);
78         }
79         else if (c == 'b') {
80             stream >> n;
81             SetB.push_back(n);
82         }
83         else
84             return false;
85     }
86     return true;
87 }
```