

```

1
2 #include <vector>
3 #include <map>
4 #include <string>
5 #include <iostream>
6 #include <utility>
7
8 class Customer {
9     public:
10         std::string first;
11         std::string last;
12         long val;
13     public:
14         Customer (std::string f, std::string l, long v)
15             : first(std::move(f)), last(std::move(l)), val(v) {
16         }
17         std::string getFirst() const {
18             return first;
19         }
20         std::string getLast() const {
21             return last;
22         }
23         long getValue() const {
24             return val;
25         }
26     };
27
28 int main()
29 {
30     std::map<int ,int> mi{ {1,2}, {5,7}};
31     auto[pos, ok] = mi.emplace(6, 8);
32     if(ok){
33         const auto&[key,value] = *pos;
34         std::cout <<key << "->"<<value<<std::endl;
35     }
36
37     std::vector<Customer> cs {{"a", "b", 1}, {"c", "d", 2}};
38     for(const auto&[f, l, v]: cs){
39         std::cout <<f << l<<v <<std::endl;
40     }
41
42 }
43

```