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/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference"
 * by Nicolai M. Josuttis, Addison-Wesley, 1999
 *
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 */
#include <iostream>
#include <map>
#include <string>
#include <iomanip>
using namespace std;

int main()
{
    // define multimap type as string/string dictionary
    typedef multimap<string, string> StrStrMMap;

    // create empty dictionary
    StrStrMMap dict;

    // insert some elements in random order
    dict.insert(make_pair("day", "Tag"));
    dict.insert(make_pair("strange", "fremd"));
    dict.insert(make_pair("car", "Auto"));
    dict.insert(make_pair("smart", "elegant"));
    dict.insert(make_pair("trait", "Merkmal"));
    dict.insert(make_pair("strange", "seltsam"));
    dict.insert(make_pair("smart", "raffiniert"));
    dict.insert(make_pair("smart", "klug"));
    dict.insert(make_pair("clever", "raffiniert"));

    // print all elements
    StrStrMMap::iterator pos;
    cout.setf (ios::left, ios::adjustfield);
    cout << ' ' << setw(10) << "english "
        << "german " << endl;
    cout << setfill(' ') << setw(20) << ""
        << setfill(' ') << endl;
    for (pos = dict.begin(); pos != dict.end(); ++pos) {
        cout << ' ' << setw(10) << pos->first.c_str()
            << pos->second << endl;
    }
    cout << endl;

    // print all values for key "smart"
    string word("smart");
    cout << word << ": " << endl;
    for (pos = dict.lower_bound(word);
        pos != dict.upper_bound(word); ++pos) {
        cout << "    " << pos->second << endl;
    }
}

```

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// print all keys for value "raffiniert"
word = ("raffiniert");
cout << word << ": " << endl;
for (pos = dict.begin(); pos != dict.end(); ++pos) {
    if (pos->second == word) {
        cout << "      " << pos->first << endl;
    }
}
}
```