

Write a function called `intersection` that takes two vectors of strings and returns a vector of those strings that appear in both of them. The strings in each vectors will be sorted alphabetically, and none of them contain duplicate elements. You should return the common elements also in alphabetical order. Use the code below, and don't change the main function. *If you would like, you can write a helper function (`contains`).*

```
#include <iostream>
#include <string>
#include <vector>
using namespace std;

// Write your function here.


// This is just a utility funtion.
void print_vector(vector<string> v) {
    for (int i = 0; i < v.size(); i++) cout << v[i] << " ";
    cout << endl;
}

int main() {
    vector<string> a = {"apple", "banana", "orange", "pear", "pineapple"};
    vector<string> b = {"banana", "grapes", "lemon", "pineapple"};

    vector<string> c = intersection(a, b);

    print_vector(c); // banana pineapple
    print_vector(intersection(a, a)); // apple banana orange pear pineapple
    print_vector(intersection(b, c)); // banana pineapple
    a.pop_back();
    print_vector(intersection(a, b)); // banana
    print_vector(intersection(a, c)); // banana
    b.push_back("strawberry");
    print_vector(intersection(a, b)); // banana
    a.push_back("strawberry");
```

```
print_vector(intersection(a, b)); // banana strawberry  
print_vector(intersection(b, c)); // banana pineapple  
}
```