

Find if k bookings possible with given arrival and departure times

给定到达和出发时间，判断K个房间是否足够使用

```
#include <bits/stdc++.h>

using namespace std;

bool areBookingsPossible(vector<int> &arrival, vector<int> &departure, int n, int k) {
    int rooms = 1;

    sort(arrival.begin(), arrival.end());
    sort(departure.begin(), departure.end());

    for (int i = 1; i < n; i++) {
        if (departure[i - 1] > arrival[i]) {
            rooms++;
        }

        if (k < rooms) {
            return false;
        }
    }
    return true;
}

int main() {
    vector<int> arrival = {1, 3, 5};
    vector<int> departure = {2, 6, 8};
    int n = 3, k = 1;
    areBookingsPossible(arrival, departure, n, k) ? printf("YES\n") : printf("NO\n");
    return 0;
}
```