

# Max Min

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

using namespace std;

string ltrim(const string &);
string rtrim(const string &);

/*
 * Complete the 'maxMin' function below.
 *
 * The function is expected to return an INTEGER.
 * The function accepts following parameters:
 * 1. INTEGER k
 * 2. INTEGER_ARRAY arr
 */

int maxMin(int k, vector<int> arr) {
    sort(arr.begin(), arr.end());
    int i=0;
    int j=k-1;
    int ans=INT_MAX;
    while(j<arr.size()){
        ans=min((arr[j]-arr[i]), ans);
        i++;
        j++;
    }
    return ans;
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string n_temp;
    getline(cin, n_temp);

    int n = stoi(ltrim(rtrim(n_temp)));

    string k_temp;
    getline(cin, k_temp);

    int k = stoi(ltrim(rtrim(k_temp)));
```

```

vector<int> arr(n);

for (int i = 0; i < n; i++) {
    string arr_item_temp;
    getline(cin, arr_item_temp);

    int arr_item = stoi(ltrim(rtrim(arr_item_temp)));

    arr[i] = arr_item;
}

int result = maxMin(k, arr);

fout << result << "\n";

fout.close();

return 0;
}

string ltrim(const string &str) {
    string s(str);

    s.erase(
        s.begin(),
        find_if(s.begin(), s.end(), not1(ptr_fun<int,
int>(isspace)))
    );

    return s;
}

string rtrim(const string &str) {
    string s(str);

    s.erase(
        find_if(s.rbegin(), s.rend(), not1(ptr_fun<int,
int>(isspace))).base(),
        s.end()
    );

    return s;
}

```