

MUSTAQIL ISHLASH UCHUN MASALALAR YECHIMLARI

1-masala. Yechim (map)

```
#include <bits/stdc++.h>
using namespace std;

int main() {
    int n, x;
    cin >> n;
    map<int,int> mp;
    for (int i = 0; i < n; i++) {
        cin >> x;
        if (x % 2 == 0) mp[x]++;
    }
    int ans = -1, mx = 0;
    for (auto p : mp) {
        if (p.second > mx) {
            mx = p.second;
            ans = p.first;
        }
    }
    cout << ans;
    return 0;
}
```

2-masala. Yechim (map + vector)

```
#include <bits/stdc++.h>
using namespace std;

int main() {
    int n;
    cin >> n;
    vector<int> v(n);
    map<int,int> mp;
    for (int i = 0; i < n; i++) {
        cin >> v[i];
        mp[v[i]]++;
    }
    for (int x : v) {
        if (mp[x] == 1) {
            cout << x;
            return 0;
        }
    }
}
```

```

        cout << -1;
        return 0;
}

```

3-masala. Yechim (two pointers + map)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n;
    cin >> n;
    vector<int> a(n);
    for (int i = 0; i < n; i++) cin >> a[i];

    map<int,int> cnt;
    int l = 0, ans = n + 1;

    for (int r = 0; r < n; r++) {
        cnt[a[r]]++;
        while (cnt.size() >= 3) {
            ans = min(ans, r - l + 1);
            cnt[a[l]]--;
            if (cnt[a[l]] == 0) cnt.erase(a[l]);
            l++;
        }
    }
    if (ans == n + 1) cout << 0;
    else cout << ans;
    return 0;
}

```

4-masala. Yechim (set)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n, m, x;
    cin >> n;
    set<int> a, b;
    for (int i = 0; i < n; i++) {
        cin >> x;
        a.insert(x);
    }
    cin >> m;
}

```

```

    for (int i = 0; i < m; i++) {
        cin >> x;
        b.insert(x);
    }
    for (int v : a)
        if (b.count(v))
            cout << v << " ";
    return 0;
}

```

5-masala. Yechim (sort)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n;
    cin >> n;
    vector<int> v(n);
    for (int i = 0; i < n; i++) cin >> v[i];

    sort(v.begin(), v.end());
    int mn = INT_MAX, cnt = 0;
    for (int i = 1; i < n; i++)
        mn = min(mn, v[i] - v[i - 1]);

    for (int i = 1; i < n; i++)
        if (v[i] - v[i - 1] == mn)
            cnt++;

    cout << cnt;
    return 0;
}

```

6-masala. Yechim (sliding window + set)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n;
    cin >> n;
    vector<int> a(n);
    for (int i = 0; i < n; i++) cin >> a[i];

    set<int> s;

```

```

    int l = 0, ans = 0;
    for (int r = 0; r < n; r++) {
        while (s.count(a[r])) {
            s.erase(a[l]);
            l++;
        }
        s.insert(a[r]);
        ans = max(ans, r - l + 1);
    }
    cout << ans;
    return 0;
}

```

7-masala. Yechim (deque)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n, k;
    cin >> n >> k;
    vector<int> a(n);
    for (int i = 0; i < n; i++) cin >> a[i];

    deque<int> dq;
    for (int i = 0; i < n; i++) {
        while (!dq.empty() && dq.front() <= i - k)
            dq.pop_front();
        while (!dq.empty() && a[dq.back()] <= a[i])
            dq.pop_back();
        dq.push_back(i);
        if (i >= k - 1)
            cout << a[dq.front()] << " ";
    }
    return 0;
}

```

8-masala. Yechim (map + vector + sort)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n, x;
    cin >> n;
    map<int,int> mp;

```

```

    for (int i = 0; i < n; i++) {
        cin >> x;
        mp[x]++;
    }
    vector<pair<int,int>> v;
    for (auto p : mp)
        v.push_back({p.second, p.first});

    sort(v.begin(), v.end(), [](auto a, auto b) {
        if (a.first != b.first) return a.first >
b.first;
        return a.second < b.second;
    });

    for (auto p : v)
        cout << p.second << " ";
    return 0;
}

```

9-masala. Yechim (sort + binary_search)

```

#include <bits/stdc++.h>
using namespace std;

int main() {
    int n, X;
    cin >> n;
    vector<int> v(n);
    for (int i = 0; i < n; i++) cin >> v[i];
    cin >> X;

    sort(v.begin(), v.end());
    auto it = lower_bound(v.begin(), v.end(), X);
    if (it != v.end() && *it == X)
        cout << (it - v.begin());
    else
        cout << -1;
    return 0;
}

```

10-masala. Yechim (two pointers + map)

```

#include <bits/stdc++.h>
using namespace std;

int main() {

```

```

int n, K;
cin >> n >> K;
vector<int> a(n);
for (int i = 0; i < n; i++) cin >> a[i];

map<int,int> cnt;
int l = 0, ans = n + 1;

for (int r = 0; r < n; r++) {
    cnt[a[r]]++;
    while ((int)cnt.size() >= K) {
        ans = min(ans, r - l + 1);
        cnt[a[l]]--;
        if (cnt[a[l]] == 0) cnt.erase(a[l]);
        l++;
    }
}
if (ans == n + 1) cout << 0;
else cout << ans;
return 0;
}

```