

NAMUNAVIY MASALALAR

1-masala. Takrorlarni olib tashlash

n ta butun son berilgan. Takrorlanuvchi elementlarni olib tashlab, qolganlarini o'sish tartibida chiqaring.

Yechim (set):

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

int main() {
    int n, x;
    cin >> n;
    set<int> s;
    for (int i = 0; i < n; i++) {
        cin >> x;
        s.insert(x);
    }
    for (int v : s)
        cout << v << " ";
    return 0;
}
```

2-masala. Eng ko'p takrorlangan son

Ketma-ketlikda eng ko'p uchragan sonni chiqaring (agar bir nechta bo'lsa, kichigini).

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;
        mp[x]++;
    }
    int ans = 0, mx = 0;
```

```

        for (auto p : mp) {
            if (p.second > mx) {
                mx = p.second;
                ans = p.first;
            }
        }
        cout << ans;
        return 0;
    }
}

```

3-masala. Eng kichik juft son

Massivdan eng kichik juft sonni toping.
Agar yo'q bo'lsa -1.

Yechim(vector):

```

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

int main() {
    int n, x;
    cin >> n;
    int mn = INT_MAX;
    for (int i = 0; i < n; i++) {
        cin >> x;
        if (x % 2 == 0)
            mn = min(mn, x);
    }
    if (mn == INT_MAX) cout << -1;
    else cout << mn;
    return 0;
}

```

4-masala. Ikkinchi eng katta element

Massivdagi ikkinchi eng katta elementni chiqaring.

Yechim(vector + 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());
cout << v[n - 2];
return 0;
}

```

5-masala. Noyob elementlar soni

Ketma-ketlikda faqat 1 marta uchraydigan elementlar sonini toping.

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;
        mp[x]++;
    }
    int cnt = 0;
    for (auto p : mp)
        if (p.second == 1)
            cnt++;
    cout << cnt;
    return 0;
}

```

6-masala. Eng uzun o'suvchi bo'lak

Ketma-ketlikdagi ketma-ket o'suvchi bo'lakning maksimal uzunligini toping.

Yechim:

```

#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];

int cur = 1, mx = 1;
for (int i = 1; i < n; i++) {
    if (v[i] > v[i - 1]) {
        cur++;
        mx = max(mx, cur);
    } else {
        cur = 1;
    }
}
cout << mx;
return 0;
}

```

7-masala. Birinchi takrorlangan son

Ketma-ketlikda birinchi bo‘lib takrorlangan sonni toping.
Agar yo‘q bo‘lsa -1.

Yechim (set):

```

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

int main() {
    int n, x;
    cin >> n;
    set<int> s;
    for (int i = 0; i < n; i++) {
        cin >> x;
        if (s.count(x)) {
            cout << x;
            return 0;
        }
        s.insert(x);
    }
    cout << -1;
    return 0;
}

```

8-masala. Eng katta yig‘indi (yonma-yon)

Yonma-yon joylashgan ikki element yig‘indisining eng kattasini toping.

Yechim:

```
#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];

    int mx = v[0] + v[1];
    for (int i = 1; i < n - 1; i++)
        mx = max(mx, v[i] + v[i + 1]);

    cout << mx;
    return 0;
}
```

9-masala. Saralashdan keyingi indeks

Massiv berilgan. Uni saralang va boshlang'ich massivdagi eng katta elementning yangi indeksini toping.

Yechim(pair + sort):

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

int main() {
    int n;
    cin >> n;
    vector<pair<int,int>> v;
    for (int i = 0; i < n; i++) {
        int x;
        cin >> x;
        v.push_back({x, i});
    }
    sort(v.begin(), v.end());
    cout << v[n - 1].second;
    return 0;
}
```

10-masala. Elementlar farqi

Massivdan shunday ikki elementni topingki, ularning farqi minimal bo'lsin.
Minimal farqni chiqaring.

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 = abs(v[1] - v[0]);
    for (int i = 1; i < n - 1; i++)
        mn = min(mn, v[i + 1] - v[i]);

    cout << mn;
    return 0;
}
```