

Been

```

#include <iostream>
#include <string>
#include <vector>
#include <map>
using namespace std;
void ok( bool q)
if (q) cout << "yes"
else cout << "no"
exit (0);
}
int main() {
    int n, k;
    string s;
    map <int, int> m;
    vector <string> v;

    cin >> n;
    if (n == 1) {
        cin >> k;
        if (k % 2 == 0) ok(1);
        else ok(0);
    }
    else if (n == 2) {
        cin >> k;
        else {
            k = (k % 10) * 10 + k % 10;
            if (k % 2 == 0) ok(1);
            else ok(0);
        }
    }
    cin >> s;
    for (int i = 0; i < s.size(); i++) m[s[i]]++;
    for (int i = 0; i < 1000; i++) {
        map <int, int> w;
        w[i/100]++;
        w[i%100]++;
        w[i%10]++;
        if (m[i/100] >= w[i/100] && m[i%100] >= w[i%100] && m[i%10] >= w[i%10]) ok(1);
    }
}

```

Парақтың артқы жағын толтырмаңыз / Обратную сторону листа не заполнять

```

#include <bits/stdc++.h>
using namespace std;
typedef long long ll;
int main() {
    int n;
    cin >> n;
    double s;
    cin >> s;
    ll minimum_index = 0, maximum_index = 0, minimum = s, maximum = s;
    for (int i = 1; i <= n; i++) {
        double cur;
        cin >> cur;
        s += abs(i) * cur;
        if (minimum > s) {
            minimum = s;
            minimum_index = i;
        }
        if (maximum < s) {
            maximum = s;
            maximum_index = i;
        }
    }
    cout << "minimum_index = " << minimum_index << " maximum_index = " << maximum_index << endl;
    return 0;
}

```



```

#include <vector>
#include <iostream>
#include <algorithm>

using namespace std;

int main()
{
    ios::sync_with_stdio(false);
    int n, b=0;
    cin >> n;
    string s;
    cin >> s;

    if (n == 1) {
        if ((s[0] == '0') % 2)
        } else if (n == 2) {
            if (( (s[1] - '0') * 10 + (s[0] - '0') ) % 8 == 0) { cout << "yes"; return 0; }
            else if ( ( (s[1] - '0') * 10 + (s[0] - '0') ) % 8 == 0) { cout << "yes"; return 0; }
        } else {
            do {
                if (s[0] != '0') {
                    if ( ( (s[n-3] - '0') * 100 + (s[n-2] - '0') * 10 + (s[n-1] - '0') ) % 8 == 0) { cout << "yes"; return 0; }
                    else if (s[n-3] == '0' && s[n-2] == '0' && s[n-1] == '0') { cout << "yes"; return 0; }
                }

                while (next_permutation(s.begin(), s.end()));

            } while (1);

            cout << "no";
            return
        }
    }
}

```

```

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

int main() {
    ios_base::sync_with_stdio(0); cin.tie(0);
    int n;
    cin >> n;
    double s;
    cin >> s;
    ll minimum_index = 0, minimum_index_0, mini = s, maximum = s;
    for (int i = 1; i <= n; i++) {
        double cur;
        cin >> cur;
        s += abs(s) * cur;
        if (minimum > s) {
            minimum = s;
            minimum_index = i;
        }
        if (maximum < s) {
            maximum = s;
            maximum_index = i;
        }
    }
    cout << minimum_index << " " << maximum_index << "\n";
    return 0;
}

```

```
#include <iostream>
#include <string>
#include <vector>
#include <map>
using namespace std;
void ok(bool q) {
    if (q) cout << "Yes";
    else cout << "NO";
    exit(0);
}
```

```
int main() {
    int n, k;
    string s;
    map<int, int> m;
    vector<string> v;
    cin >> n;
    if (n == 1) {
        cin >> k;
        if (k % 8 == 0) ok(1);
    }
}
```

```
#include <bits/stdc++.h>
#include <ext/ptr-ds/assoc-container.hpp>
#include <ext/ptr-ds/tree-policy.hpp>
#define max3(a, b, c) max(a, max(b, c))
#define min3(a, b, c) min(a, min(b, c))
#define mp make_pair
#define pb push_back
#define up upper-bound
#define lp lower-bound
#define F first
#define S second
#define start ios_base::sync_with_stdio(0); cin.tie(0); cout.tie(0);
#define Y1 asdasd
#define go continue
```

```
using namespace std;
using namespace go;

```

```
typedef long long ll;
typedef unsigned long long ull;
typedef pair<int, int> pii;
typedef pair<ll, ll> pll;
typedef vector<int> vi;
typedef vector<pii> vii;
typedef vector<ll> vll;
typedef vector<pll> vlll;
```

```
typedef set<int> si;
const int N = 1e5 + 10;
const int M = 1e6 + 10;
const int mod = 1e9 + 7;
const int INF = 0x3f3f3f3f;
const int VER = 1e18 + 5;
const double PI = 3.141592653589;
```

```
int n, a[M], ans;
void input() {
    cin >> n;
    for (int i = 1; i <= n; i++) {
        cin >> a[i];
    }
}
```

```
bool check(int x, int y) {
    int c = x * y;
    int d = (int) sqrt(c);
    if (d * d == c)
        return true;
    return false;
}
```

```
void solve() {
    input();
    for (int i = 1; i <= n; i++)
        for (int j = i + 1; j <= n; j++)
            if (check(a[i], a[j]))
                cout << ans++ << endl;
}
```

```
int main() {
    start;
    solve();
    return 0;
}
```

C++

```
#include <iostream>
# define ll long long int
using namespace std;
int main() {
    ll n, q, a[101000], b[101000], l, r;
    cin >> n >> q;
    for (int i = 1; i <= n; i++) cin >> a[i];
    for (int i = 1; i <= n; i++) {
        cin >> b[i];
        a[i] -= b[i];
        a[i] = a[i] * a[i] + a[i-1];
    }
    while (q--) {
        cin >> l >> r;
        cout << a[r] - a[l-1] << "\n";
    }
}
```

B-сесбі

```
#include <iostream>
#include <algorithm>
using namespace std;
```

```
int main()
```

```
{
```

```
int n;
```

```
float s;
```

```
cin >> n >> s;
```

```
double max_m = s, min_m = s, max_d = 0, min_d = 0;
```

```
for (int i = 0; i < n; i++)
```

```
float percent;
```

```
cin >> percent;
```

```
s = s + (abs(s) * percent)
```

```
if (s > max_m) { max_m = s; max_d = i + 1; }
```

```
if (s < min_m) { min_m = s; min_d = i + 1; }
```

```
cout << min_d << " " << max_d;
```

```
return 0;
```


A - ceebi.

include <iostream>

include <string>

include <vector>

include <map>

define ll long long

using namespace std;

void ok (bool g) {

if (g) cout << "YES";

else cout << "NO";

exit(0);

int main() {

ll n, k;

string s;

map <ll, ll> m;

vector <string> v;

cin >> n;

if (n == 1) {

cin >> k;

if (k % 8 == 0) ok (1);

else ok (0);

else if (n == 2)

cin >> k;

if (k % 8 == 0) ok (1);

else

k = (k % 10) * 10 + k / 10;

if (k % 8 == 0) ok (1);

else ok (0);

cin >> s;

for (int i = 0; i < s.size(); i++) m [s[i] - '0'] ++;

for (int i = 0; i < 1000; i += 8) {

map <ll, ll> w;

w [i / 100] ++;

w [i % 100 / 10] ++;

w [i % 10] ++;

if (m [i / 100] >= w [i / 100] && m [i % 100 / 10] >= w [i % 100 / 10] && m [i % 10] >= w [i % 10]) ok (1);

ok (0);

```

#include <bits/stdc++.h>
using namespace std;
typedef long long ll;
int main() {
    ios_base::sync_with_stdio(0); cin.tie(0);
    int n, q;
    cin >> n >> q;
    ll a[n+1];
    a[0] = 0;
    for (int i = 1; i <= n; i++) cin >> a[i];
    for (int i = 1; i <= n; i++) {
        ll cur;
        cin >> cur;
        a[i] -= cur;
    }
    ll s[n+1];
    s[0] = 0;
    for (int i = 1; i <= n; i++) s[i] = s[i-1] + a[i] * a[i];
    for (int j = 1; j <= q; j++) {
        int l, r;
        cin >> l >> r;
        cout << s[r] - s[l-1] << '\n';
    }
    return 0;
}

```

B eebi

```
#include <iostream>
#include <algorithm>
using namespace std;
int main()
{
    int n;
    float s;
    cin >> n >> s;
    double max_m = s, min_m = s, max_d = 0, min_d = 0;
    for(int i = 0; i < n; i++) {
        float percent;
        cin >> percent;
        s = s + (abs(s) * percent);
        if(s > max_m) {max_m = s; max_d = i + 1;}
        if(s < min_m) {min_m = s; min_d = i + 1;}
    }
    cout << min_d << " " << max_d;
    return 0;
}
```

А есебі

```

#include <iostream>
#include <string>
#include <vector>
#include <map>
#define ll long long
using namespace std;
void ok(bool q) {
    if (q) cout << "Yes";
    else cout << "NO";
    exit(0);
}
int main() {
    ll n, k;
    string s;
    map <ll, ll> m;
    vector <string> v;
    cin >> n;
    if (n == 1) {
        cin >> k;
        if (k % 8 == 0) ok(1);
        else ok(0);
    }
    else if (n == 2) {
        cin >> k;
        if (k % 8 == 0) ok(1);
        else {
            k = (k % 10) * 10 + k / 10;

```

```

        if (k % 8 == 0) ok(1);
        else ok(0);
    }
    cin >> s;
    for (int i = 0; i < s.size(); i++) m[s[i] - '0']++;
    for (int i = 0; i < 1000; i += 8) {
        map <ll, ll> w;
        w[i / 100]++;
        w[i % 100 / 10]++;
        w[i % 10]++;
        if (m[i / 100] >= w[i / 100] && m[i % 100 / 10] >= w[i % 100 / 10] && m[i % 10] >= w[i % 10]) ok(1);
    }
    ok(0);
}

```

```

A. #include <vector>
#include <iostream>
#include <algorithm>
using namespace std;
int main()
{
ios::sync_with_stdio(false);
int n, b=0;
cin >> n;
string s;
cin >> s;
if (n==1)
if (((s[0]-'0')%8==0) {cout << "YES"; return 0;}
} else if (n==2) {
if (((s[0]-'0')*10+(s[1]-'0')%8==0) {cout << "YES"; return 0;}
else if (((s[1]-'0')*10+(s[0]-'0')%8==0) {cout << "YES"; return 0;}
}
} else {
do {
if (s[0]!='0') {
if (((s[n-3]-'0'*100+(s[n-2]-'0')*10+(s[n-1]-'0')%8==0) {cout << "YES"; return 0;}
else if (s[n-3]=='0' && s[n-2]=='0' && s[n-1]=='0') {cout << "YES"; return 0;}
}
} while (next_permutation(s.begin(), s.end()));
}
cout << "NO";
return 0;
}

```

```
B: #include <iostream>
#include <algorithm>
using namespace std;

int main()
{
    int n;
    float s;
    cin >> n >> s;
cin >>
    double max_m = s, min_m = s, max_d = 0, min_d = 0;

    for (int i = 0; i < n; i++) {
        float percent;
        cin >> percent;

        s = s + (abs(s) * percent);
        if (s > max_m) { max_m = s; max_d = i + 1; }
        if (s < min_m) { min_m = s; min_d = i + 1; }
    }

    cout << min_d << " " << max_d;

    return 0;
}
```

```
C. #include <iostream>
#include
#define ll long long int
using namespace std;
int main() {
    ll n, q, a[101000], b[101000], l, r;
    cin >> n >> q;
    for (int i = 1; i <= n; i++) cin >> a[i];
    for (int i = 1; i <= n; i++) {
        cin >> b[i];
        a[i] -= b[i];
        a[i] = a[i] * a[i] + a[i-1];
    }
    while (q--) {
        cin >> l >> r;
        cout << a[r] - a[l-1] << "\n";
    }
}
```

```
c) #include <bits/stdc++.h>
using namespace std;
typedef long long ll;

int main() {
    ios_base::sync_with_stdio(0); cin.tie(0);
    int n, q;
    cin >> n >> q;
    ll a[n+1];
    a[0] = 0;
    for (int i=1; i<=n; i++) cin >> a[i];
    for (int i=1; i<=n; i++) {
        ll cur;
        cin >> cur;
        a[i] -= cur;
    }
    ll s[n+1];
    s[0] = 0;
    for (int i=1; i<=n; i++) s[i] = s[i-1] + a[i] * a[i];
    for (int j=1; j<=q; j++) {
        int l, r;
        cin >> l >> r;
        cout << s[r] - s[l-1] << " ";
    }
    return 0;
}
```



```
B) #include <iostream>
#include <algorithm>
using namespace std;
int main()
{
    int n;
    float s;
    cin >> n >> s;
    double max_m = s, min_m = s, max_d = 0, min_d = 0;
    for (int i = 0; i < n; i++) {
        float percent;
        cin >> percent;
        s = s + (abs(s) * percent);
        if (s > max_m) { max_m = s; max_d = i + 1; }
        if (s < min_m) { min_m = s; min_d = i + 1; }
    }
    cout << min_d << " " << max_d;
    return 0;
}
```

```

A) #include <iostream>
#include <string>
#include <vector>
#include <map>
#define ll long long
using namespace std;
void ok(bool q) {
    if (q) cout << "Yes";
    else cout << "No";
    exit(0);
}

int main() {
    ll n, k;
    string s;
    map <ll, ll> m;
    vector <string> v;
    cin >> n;
    if (n == 1) {
        cin >> k;
        if (k % 8 == 0) ok(1);
        else ok(0);
    }
    else if (n == 2) {
        cin >> k;
        if (k % 8 == 0) ok(1);
        else {
            k = (k % 10) * 10 + k / 10;
            if (k % 8 == 0) ok(1);
            else ok(0);
        }
    }
    cin >> s;
    for (int i = 0; i < s.size(); i++) m[s[i] - '0']++;
    for (int i = 0; i < 1000; i += 8) {
        map <ll, ll> w;
        w[i / 100]++;
        w[i % 100 / 10]++;
        w[i % 10]++;
        if (m[i / 100] == w[i / 100] && m[i % 100 / 10] == w[i % 100 / 10] && m[i % 10] == w[i % 10]) ok(1);
    }
    ok(0);
}

```

Problem B. Denozum-

```

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

int main() {
    ios_base::sync_with_stdio(0); cin.tie(0);
    int n;
    cin >> n;
    double s;
    cin >> s;
    ll minimum_index = 0, maximum_index = 0, minimum = s, maximum = s;
    for (int i = 1; i <= n; i++) {
        double cur;
        cin >> cur;
        s += abs(s) * cur;
        if (minimum > s) {
            minimum = s;
            minimum_index = i;
        }
        if (maximum < s) {
            maximum = s;
            maximum_index = i;
        }
    }
    cout << minimum_index << " " << maximum_index << "\n";
    return 0;
}

```

Problem C. Квадратная последовательность

```

#include <iostream>
#define ll long long int
using namespace std;

int main() {
    ll n, q, a[401000], b[401000], l, r;
    cin >> n >> q;
    for (int i = 1; i <= n; i++) cin >> a[i];
    for (int i = 1; i <= n; i++) {
        cin >> b[i];
        a[i] = a[i] * a[i] + a[i-1];
    }
    while (q--) {
        cin >> l >> r;
        cout << a[r] - a[l-1] << "\n";
    }
}

```

Problem A. Бөлінегі ме?

```
#include <iostream>
```

```
#include <string>
```

```
#include <vector>
```

```
#include <map>
```

```
#define ll long long
```

```
using namespace std;
```

```
void ok (bool q) {
```

```
    if (q) cout << "YES";
```

```
    else cout << "NO";
```

```
    exit (0);
```

```
}
```

```
int main () {
```

```
    ll n, k;
```

```
    string s;
```

```
    map <ll, ll> m;
```

```
    vector <string> v;
```

```
    cin >> n;
```

```
    if (n == 1) {
```

```
        cin >> k;
```

```
        if (k % 8 == 0) ok (1);
```

```
        else ok (0);
```

```
    }
```

```
    else if (n == 2) {
```

```
        cin >> k;
```

```
        if (k % 8 == 0) ok (1);
```

```
        else {
```

```
            k = (k % 10) * 10 + k / 10;
```

```
            if (k % 8 == 0) ok (1);
```

```
            else ok (0);
```

```
        }
```

```
    }
```

```
    cin >> s;
```

```
    for (int i = 0; i < s.size(); i++) m [s [i] - '0'] ++;
```

```
    for (int i = 0; i < 1000; i += 8) {
```

```
        map <ll, ll> w;
```

```
        w [i / 100] ++;
```

```
        w [i % 100 / 10] ++;
```

```
        w [i % 10] ++;
```

```
        if (m [i / 100] >= w [i / 100] && m [i % 100 / 10] >= w [i % 100 / 10] && m [i % 10] >= w [i % 10]) ok (1);
```

```
    }
```

```
    ok (0);
```

```
}
```

Парақтың артқы жағын толтырмаңыз / Обратную сторону листа не заполнять

```

#include <iostream>
#include <string>
#include <vector>
#include <map>
#define H 1000000
using namespace std;
void ok(int n) {
    if (n) cout << "YES" << endl;
    else cout << "NO" << endl;
    exit(0);
}
int main() {
    int n, k;
    string s;
    map<int, int> m;
    vector<string> v;
    cin >> n;
    if (n == 1) {
        cin >> k;
        if (k % 8 == 0) ok(2);
        else ok(0);
    }
    else if (n == 2) {
        cin >> k;
        if (k % 8 == 0) ok(2);
        if (k % 8 == 0) ok(2);
        else {
    
```

```

if (k % 8 == 0) ok(2);
        k = (k % 10) * 10 + k / 10;
        if (k % 8 == 0) ok(2);
        else ok(0);
    }
}
cin >> s;
for (i = 0; i < s.size(); i++) m[s[i] - '0']++;
for (i = 0; i < 1000; i = 8) {
    map<int, int> w;
    w[i % 100]++;
    w[i % 10]++;
    if (m[i % 100] > w[i % 100] && m[i % 100 / 10] > w[i % 100 / 10] && m[i % 10] > w[i % 10]) ok(2);
}
ok(0);
    
```

Problem B - Dorigum.

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

```
using namespace std;
```

```
typedef long long ll;
```

```
int main() {
```

```
ios_base::sync_with_stdio(); cin.tie();
```

```
int n;
```

```
ll r >> n;
```

```
double s;
```

```
ll r >> s;
```

```
ll minimum = 1e18, maximum = 0, min_idx = 5, max_idx = 5;
```

```
for (int i = 1; i <= n; i++)
```

```
double cur
```

```
ll r >> cur;
```

```
ll r >> cur;
```

```
s = abs(s) * cur;
```

```
if (minimum > s)
```

```
minimum = s;
```

```
min_idx = i;
```

```
}
```

```
if (maximum < s)
```

```
maximum = s;
```

```
max_idx = i;
```

```
}
```

```
cout << minimum - index << " < maximum - index << endl;
```

```
return 0;
```