

Name: Sucheta Pal

UID: 20BCS7901

Q1. Temple land

Code:

```
#include <bits/stdc++.h>
using namespace std;
// INT HERE MEANS LONG LONG
#define int long long
#define endl '\n'

bool solve(int* arr, int n)
{
    if(arr[0]!=1 || arr[n-1]!=1)
        return false;
    if(n%2 == 0)
        return false;

    for(int i = 0; i<n/2; i++)
    {
        if((arr[i]-arr[i+1])!=-1)
            return false;
    }
    for(int i = n/2; i<n-1; i++)
    {
        if((arr[i]-arr[i+1])!=1)
            return false;
    }
    return true;
}

int32_t main(){
    ios_base::sync_with_stdio(false);
    cin.tie(NULL);

    int t;
    cin >> t;
    while (t--){
        int n;
        cin>>n;
        int* arr = new int[n];

        for(int i = 0; i<n; i++)
        {
            cin>>arr[i];
```

```


    }

    if(solve(arr,n))
        cout<< "yes"<<endl;

    else
        cout<<"no"<<endl;
    }
    return 0;
}

```

Output:

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26 / 50


Solve 24 more problems to get Bronze Badge

Status: ✓ Correct Answer
Submission ID: [84628083](#)

Time:
0.00s

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Q2. That Is my Score!

Code:

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

```
using namespace std;
```

```
int main()
```

```
{
```

```
map<int,int> m;
```

```
int n, x,y,sum=0,t;
```

```
cin>>t;
```

```
while(t--)
```

```
{
```

```
cin>>n;
```

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

```
{
```

```
cin>>x>>y;
```

```
if(x<=8)
```

```
{
```

```
m[x]=max(m[x],y);
```

```
}
```

```
}
```

```
map<int, int>::iterator it;
```

```
for(it=m.begin();it!=m.end();it++)
```

```
{
```

```
sum=sum+(*it).second ;
```

```
}
```

```
cout<<sum<<endl;
```

```
sum=0;
```

```

m.clear();

}

return 0 ;

}

```

Test against Custom Input

```

2
5
2 45
9 100

```

Problem Solver Badge
27 / 50

Next Problem

Solve 23 more problems to get Bronze Badge

Status: ✓ Correct Answer
Submission ID: [84628240](#)

Time: 0.01s

Result

Q3. Pairwise AND Sum

Code:

```

#include <bits/stdc++.h>

using namespace std;

#define ll long long int

int main() {

    // your code goes here

    ll n;

    cin>>n;

```

```

vector<ll> v(n);

vector<ll> arr(31);

for(ll i=0;i<n;i++){

    cin>>v[i];

}

ll sum=0;

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

    for(int j=0;j<31;j++){

        if((v[i])&(1<=j)) arr[j]++;

    }

}

for(int j=0;j<31;j++){

    ll cnt=(arr[j]*(arr[j]-1))/2;

    sum+=(cnt*(1<=j));

}

cout<<sum<<endl;

return 0;

}


```

Test against Custom Input ^

5
1 2 3 4 5


Problem Solver Badge

28 / 50



Next Problem

Solve 22 more problems to get Bronze Badge

Status:  Correct Answer

Submission ID: [84628407](#)

Time:

0.04s

Q4. Roads in Chef land

Code:

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

using namespace std;

void solve()
{
    int n;
    cin >> n;
    if ((n & (n - 1)) == 0)
    {
        cout << -1 << endl;
    }
    return;
```

```

    }

    long long ans = 0;

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

        ans += ((n - i) / (i < 1)) * i;

    for (int i = 2; i < n; i <= 1)

        ans += i;

    cout << ans << endl;

}

int main()

{

    ios_base::sync_with_stdio(false);

    cin.tie(NULL);

    int t;

    cin >> t;

    while (t--)

    {

        solve();

    }

    return 0;

}

```

2
3
5

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Solve 21 more problems to get Bronze Badge

Next Problem

Status: Correct Answer

Submission ID: [84628615](#)

Time:

0.30s

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Q5. Gold collection

Code:

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

int main() {
    int t;
    scanf("%d",&t);
    while(t--)
    {
        int n;
        scanf("%d",&n);

        int arr[n];
        for(int i=0;i<n;i++)
        {
            scanf("%d",&arr[i]);
        }
        for(int i=1;i<n;i++)
        {
            arr[i]+=arr[i-1];
        }
    }
}
```



```

    }
    int q;
    scanf("%d",&q);
    for(int i=0;i<q;i++)
    {
        int q1,q2;
        scanf("%d%d",&q1,&q2);
        if(q1==1)
        {
            printf ("%d\n" ,arr[q2-1]);
        }
        else
        {
            printf("%d\n" , arr[q2-1]-arr[q1-2]);
        }
    }
}

return 0;
}

```

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30 / 50

Solve 20 more problems to get Bronze Badge



Status: ✓ Correct Answer

Submission ID: [84629358](#)

Time:
0.19s

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Q6. Chef and Sub Array

Code:

```

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

int n, k, p, a[200001], sum[200001], maxi[524288];

```

```

string s;

void build(int node, int l, int r) {
    if (l == r) {
        maxi[node] = sum[l];
        return;
    }
    int p1 = 2 * node + 1, p2 = 2 * node + 2, c = (l + r) / 2;
    build(p1, l, c);
    build(p2, c + 1, r);
    maxi[node] = max(maxi[p1], maxi[p2]);
}

int query(int node, int l, int r, int i, int j) {
    if (l == i && r == j)
        return maxi[node];
    int p1 = 2 * node + 1, p2 = 2 * node + 2, c = (l + r) / 2;
    if (j <= c) return query(p1, l, c, i, j);
    if (i > c) return query(p2, c + 1, r, i, j);
    return max(query(p1, l, c, i, c), query(p2, c + 1, r, c + 1, j));
}

int main() {
    ios::sync_with_stdio(0); cin.tie(0); cout.tie(0);
    //freopen("test01.in", "r", stdin);
    //freopen("test01.out", "w", stdout);
    cin >> n >> k >> p;
    k = min(k, n);
    for (int i = 1; i <= n; i++) {
        cin >> a[i];
        a[n + i] = a[i];
    }
    cin >> s;
    sum[0] = 0;
    for (int i = 1; i <= k; i++)
        sum[i] = sum[i - 1] + a[i];
    for (int i = k + 1; i <= 2 * n; i++)
        sum[i] = sum[i - 1] + a[i] - a[i - k];
    build(0, 1, 2 * n);
    for (int i = 0, pos = 1; i < s.size(); i++) {
        if (s[i] == '?')
            cout << query(0, 1, 2 * n, pos + k - 1, pos + n - 1) << "\n";
        else {
            pos--;
            if (pos < 1)
                pos = n;
        }
    }
}

```

```

    }
}
return 0;
}

```

Test against Custom Input

```

5 3 4
1 0 0 1 1
?!!?

```

Problem Solver Badge
31 / 50

Next Problem

Solve 19 more problems to get Bronze Badge

Status: ✓ Correct Answer
Submission ID: [84629757](#)

Q7. Multiple Linked Lists

```

#include <iostream>
using namespace std;
struct Node{
    int data;
    Node* link;
    Node* head = NULL;
    bool circular = false;
    int *table = new int[1001];
    Node* NodeTable[1001];
    int N = 0;
public:
    int* getTable()
    {
        return table;
    }
}

```

```

}
Node()
{
    for(int i = 0; i < 1001; i++)
        table[i] = 0;
    for(int i = 0; i < 1001; i++)
        NodeTable[i] = NULL;
}
void first(int x){
    Node* temp1 = new Node;
    temp1->data = x;
    temp1->link = NULL;
    NodeTable[x] = temp1;
    N++;
    if(head == NULL)
    {
        head = temp1;
        table[head->data] = 0;
        return;
    }
    Node* temp = head;
    while(temp->link != NULL)
        temp = temp->link;
    temp->link = temp1;
}

void second(int y, int x)
{
    N++;
    find(y) ? insertAfter(y, x) : insertBefore(y, x);
}
void insertBefore(int y, int x)
{
    Node* temp = new Node;
    temp->data = y;
    temp->link = NULL;
    NodeTable[y] = temp;
    if(head->data == x)
    {
        temp->link = head;
        head = temp;
        return;
    }
    Node* temp1 = head;
    while(temp1->link->data != x)
        temp1 = temp1->link;

```

```

temp->link = temp1->link;
temp1->link = temp;
}

```

```

void insertAfter(int y, int x){
    Node* temp = new Node;
    temp->data = x;
    temp->link = NULL;
    NodeTable[x] = temp;
    Node* temp1 = head;
    while(temp1->data != y)
        temp1 = temp1->link;
    temp->link = temp1->link;
    temp1->link = temp;
}

```

```

void third(int x, int y, int z)
{
    Node* temp1 = new Node;
    temp1->data = z;
    temp1->link = NULL;
    NodeTable[z] = temp1;
    int distance = 0;
    Node* temp = head;
    while(temp->data!=x)
        temp=temp->link;
    Node* Initial = temp;
    while(temp->data != y)
    {
        temp = temp->link;
        distance++;
    }
    distance /= 2;
    while(distance != 0)
    {
        Initial = Initial->link;
        distance--;
    }
    temp1->link = Initial->link;
    Initial->link = temp1;
    N++;
}

```

```

bool find(int x)
{
    Node* temp = head;

```

```

while(temp != NULL)
{
    if(temp->data == x)
        return true;
    temp = temp->link;
}
if(temp == NULL)
    return false;
}

void display()
{
    Node* temp = head;
    while(temp != NULL)
    {
        cout << temp->data << " ";
        temp = temp->link;
    }
}

void fourth(int x, int p)
{
    if(find(x) == false)
        return;
    Node* temp = NodeTable[x];
    while(p != 0)
    {
        if(temp->link == NULL)
        {
            temp->link = head;
            temp = head;
            circular = true;
            p--;
        }
        else
        {
            temp = temp->link;
            p--;
        }
    }
    NodeTable[x]->link = temp;
}

void createtable()
{
    for(int i = 1; i < 1001; i++)
        if(NodeTable[i] != NULL)
            if(NodeTable[i]->link != NULL)

```

```

        table[NodeTable[i]->link->data]++;
    }
    void displaytable()
    {
        for(int i = 1; i < 10; i++)
            cout << i << " " << table[i] << endl;
    }
    bool Circular()
    {
        return circular;
    }
    int length()
    {
        return N;
    }
};
int main()
{
    Node A;
    int N;
    cin >> N;
    char c;
    int b;
    for(int i = 0; i < N; i++)
    {
        cin>>c;
        cin>>b;
        if(c == 'T' && b == 0)
        {
            int x;
            cin >> x;
            A.first(x);
        }
        else if(c == 'T' && b == 1)
        {
            int x,y;
            cin >> x >> y;
            A.second(x, y);
        }

        else if(c == 'T' && b == 2)
        {
            int x, y, z;
            cin >> x >> y >> z;
            A.third(x, y, z);
        }
    }
}

```

```

        else if(c == 'U')
        {
            int p;
            cin >> p;
            A.fourth(b, p);
        }
    }
    A.createtable();
    int* ansTable = A.getTable();
    int countMultiple = 0;
    A.Circular() ? cout << 1 << endl : cout << 0 << endl;
    for(int i = 1; i <= 1000; i++)
        if(ansTable[i] >= 2)
            countMultiple++;
    if(countMultiple == 0)
    {
        cout << 0 << endl;
        A.display();
    }
    else
    {
        cout << countMultiple << endl;
        for(int i = 1; i <= 1000; i++)
            if(ansTable[i] >= 2)
                cout << i << " ";
        cout<<endl;
        for(int i = 1; i <= 1000; i++)
            if(ansTable[i] >= 2)
                cout << ansTable[i] << " ";
    }
    cout << endl;
}

```


Problem Solver Badge

32 / 50



Solve 18 more problems to get Bronze Badge

Status: ✓ Correct Answer

Submission ID: [84630017](#)

Time:

0.00s

Sub-Task	Task #	Result (time)
1	0	AC (0.004141)