

DAY 4

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SECTION :- DWWC - 43

SUBJECT :- IT SKILLS

Q1) <https://www.codechef.com/problems/WATSCORE>

Program code :-

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

int main() {
    int t;    cin
    >> t;    while(t--){
        int n;
        cin >> n;        int
        a[n];    int b[n];
        int sum=0;
        for(int i=0; i<n; i++){
            cin >> a[i] >> b[i];
        }

        for(int i=1; i<9; i++){            int
        max=0;        for(int j=0; j<n; j++){
        if(i==a[j]        &&        b[j]>max){
        max=b[j];
```

```

        }
    }

    sum = sum+max;

}

    cout << sum << endl;

}

return 0;

}

```

Output :-

Status: ✓ Correct Answer		Submission ID: 84576402
Time: 0.01s		
Sub-Task	Task #	Result (time)
1	1	AC (0.005187)
Subtask Score: 15.00%		Result - AC
2	2	AC (0.004130)
Subtask Score: 15.00%		Result - AC
3	3	AC (0.005558)
Subtask Score: 70.00%		Result - AC
Total Score = 100.00%		

Q2) <https://www.codechef.com/problems/TEMPLELA>

Program code :-

```

#include <iostream> using
namespace std;

int main() {

    int s;  cin

>> s;  while (s--)

```

```

{
    int n;

    cin >> n;

    int a[n];

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

        cin >> a[i];

    }

    if (n % 2 == 0) {
cout << "no" << endl;
continue;

    }

    bool flag = 1;

    int mid = (n - 1) / 2;

    int i;

    for (i = 0; i < mid;
i++) {
        if (a[i] != i + 1) {
            flag = 0;

        }

    }

    if (a[mid] != i + 1) {
        flag = 0;

    }

    for (int i = mid + 1; i < n;
i++) {
        if (a[i] != n - i) {
            flag = 0;

        }

    }

    cout << (flag == 1 ? "yes" : "no") << endl;

}

return 0;


```

```
}
```

Output :-

Problem Solver Badge

35 / 50



Solve 15 more problems to get Bronze Badge

Status: ✓ Correct Answer

Submission ID: [84576836](#)

Time:

0.00s

Congratulations on solving the problem. Visit our practice section to solve more interesting problems

[View another problem](#) →

Q3) <https://www.codechef.com/problems/AND>

Program code :-

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

int main() {    long sum[30] =
{};    int N,a;    long ans = 0;
cin>>N;    for(int i=0; i<N;
i++){        cin>>a;        ans-
=a;        for(int j=0; a; a=a>>1,
j++){            if(a&1)
sum[j]++;
```

```

    }
}
for(int j=0; j<30; j++){
ans+=(sum[j]*sum[j])<<j;
}
cout<<ans/2<<endl;

return 0;
}

```

Output :-

Sub-task	Task #	(time)
1	0	AC (0.003750)
1	1	AC (0.003850)
Subtask Score: 13.00%		Result - AC
2	2	AC (0.004156)
2	3	AC (0.004175)
Subtask Score: 39.00%		Result - AC
3	4	AC (0.014273)
Subtask Score: 21.00%		Result - AC
4	5	AC (0.032211)
4	6	AC (0.032063)
Subtask Score: 27.00%		Result - AC

Q4) <https://www.codechef.com/problems/CROADS>

Program 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;  
}
```

Output :-

The screenshot displays the CodeChef problem solver interface. At the top, it shows the 'Problem Solver Badge' progress bar at 37/50, indicating the user is 13 problems away from a Bronze Badge. A gold medal icon is also visible. A blue button labeled 'Next Problem' is on the right. The main area shows the submission status: 'Status: ✓ Correct Answer' and 'Submission ID: 84577600'. Below this, the execution time is listed as 'Time: 0.31s'. At the bottom, a congratulatory message says 'Congratulations on solving the problem. Visit our practice section to solve more interesting problems', with a link 'View another problem' and a right arrow icon.

Q5) <https://www.codechef.com/problems/CHEFSUBA>

Program 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;
}

```

Output :-

C++17		   
1	7	(0.004109)
Subtask Score: 30.00%		Result - AC
2	8	AC (0.011471)
2	9	AC (0.013302)
2	10	AC (0.013318)
2	11	AC (0.013602)
2	12	AC (0.014672)
2	13	AC (0.012340)
2	14	AC (0.014802)
2	15	AC (0.015200)
Subtask Score: 70.00%		Result - AC
Total Score = 100.00%		