#### DAY 4

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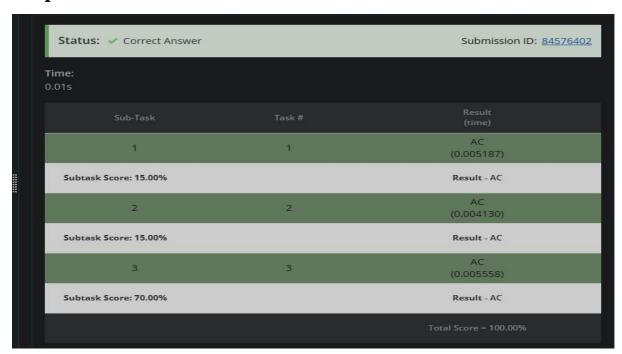
**SECTION:-DWWC-43** 

**SUBJECT:-IT SKILLS** 

### Q1) <a href="https://www.codechef.com/problems/WATSCORE">https://www.codechef.com/problems/WATSCORE</a>

```
#include <iostream> using
namespace std;
int main() {
       int t; cin
>> t; while(t--){
  int n;
cin >> n;
                 int
         int b[n];
a[n];
  int sum=0;
          for(int i=0; i<n; i++){
     cin >> a[i] >> b[i];
          }
   for(int i=1; i<9; i++){
                                   int
               for(int j=0; j< n; j++){
max=0;
if(i==a[j]
                          b[j]>max)
                &&
\max=b[j];
```

```
} sum = sum+max;
}
cout << sum << endl;
}
return 0;
}</pre>
```

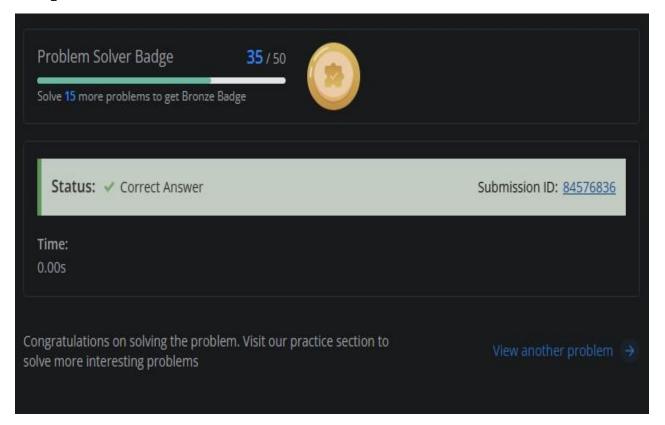


## Q2) https://www.codechef.com/problems/TEMPLELA

```
#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;</pre>
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;
```



#### Q3) <a href="https://www.codechef.com/problems/AND">https://www.codechef.com/problems/AND</a>

```
#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-
        for(int j=0; a; a=a>>1,
=a;
             if(a&1)
j++){}
sum[j]++;
```

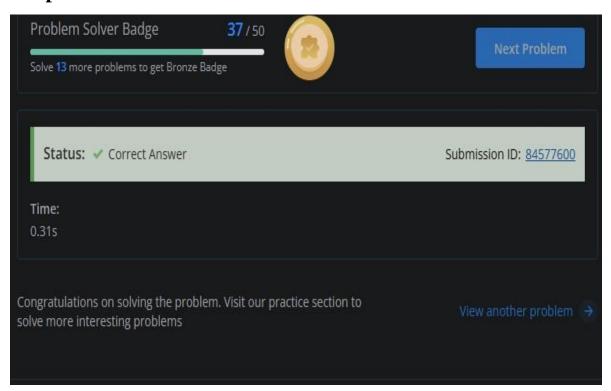
```
}
for(int j=0; j<30; j++){
ans+=(sum[j]*sum[j])<<j;
}
cout<<ans/2<<endl;
return 0;
}</pre>
```

C++14	*		平 口 圆 戀 "
		lask#	
	1	0	AC (0.003750)
	1	1	AC (0.003850)
Subtas	k Score: 13.00%		Result - AC
	2	2	AC (0.004156)
	2	3	AC (0.004175)
Subtas	k Score: 39.00%		Result - AC
	3	4	AC (0.014273)
Subtas	k Score: 21.00%		Result - AC
	4	5	AC (0.032211)
	4	6	AC (0.032063)
Subtas	k Score: 27.00%		Result - AC
			+ 10 200 5050

#### Q4) <a href="https://www.codechef.com/problems/CROADS">https://www.codechef.com/problems/CROADS</a>

```
#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 \le n; i \le 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;
```



#### Q5) https://www.codechef.com/problems/CHEFSUBA

```
#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 = (1 + 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 = (1 + r) / 2; if (j \le c) return query(p1, 1, c)
(c, i, j); if (i > c) return query(p2, c + 1, r, i, j); return
\max(\text{query}(p1, 1, c, i, c), \text{query}(p2, c + 1, r, c + 1, i));
}
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 \le n; i++) {
                                  cin >>
          a[n+i] = a[i];
a[i];
  }
  cin >> s; sum[0] = 0; for (int i
= 1; i \le 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;
}</pre>
```

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