

TPC 3.0 SOLUTIONS

Editorial for the Team Programming contest conducted on 10th June 2022 has been provided below in C++. Kindly go through the approach and submit your own code. Contest link has also been attached here

<https://www.hackerrank.com/contests/team-programming-contest-3-0/challenges>

1. ODD MAN OUT

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

```
using namespace std;
```

```
int main(){
    int n,tmp;
    cin >> n;
    int xr = 0;
    for(int i=0;i<n;i++){
        cin >> tmp;
        xr ^= tmp;//Based on the property of xor i.e, $n^0=0$  and  $n^1=n$ 
    }
    if(xr == 0) cout << "-1\n";
    else cout << xr << "\n";

    return 0;
}
```

2. THE GAME OF COINS

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

```
int main() {
```

```
    int t, n;
    cin>>t;
```

```

while(t--){
    cin>>n;
    int ct =0;
    n-=1;
    for(int i=1; i*i<=n; i++){
        if(n%i == 0){
            ct+=1;
            if(n/i != i){
                ct +=1;
            }
        }
    }
    cout<<ct<<"\n";
}

return 0;

}

```

3.MINING PRECIOUS STONES

```

#include <bits/stdc++.h>
using namespace std;
int main() {
    int n,k;
    cin>>n>>k;
    string s;
    cin>>s;
    int cnt=0,ans=0;
    for(int i=0;i<n;i++)
    {
        if(s[i]=='0')
        {
            cnt++;
        }
        else
        {
            ans+= (cnt/k);
            cnt=0;
        }
    }
}

```

```

    }
    ans+= (cnt/k);
    cout<<ans<<endl;
    return 0;
}

```

4.COLOURFUL ERASERS

```

#include <iostream>
#include <assert.h>
#include <map>

```

```

using namespace std;

```

```

int main(){
    int n;
    cin >> n;
    map<string, int> mp;
    for(int i=0;i<n;i++){
        string tmp;
        cin >> tmp;
        mp[tmp]++;
    }

```

```

    int g = 0;
    for(auto it=mp.begin();it!=mp.end();it++) g = max(g, it->second);

```

```

    int r = n-g;
    cout << min(g, r+1) + r << "\n";

```

```

    return 0;
}

```