

Problem:

<https://www.codechef.com/LTIME109D/submit/EQBYXOR>

Code : C++

```
#include <bits/stdc++.h>
using namespace std;
#define ll long long int
int main(){
    ll t;
    cin>>t;
    while(t--){
        ll x,y,n;
        cin>>x>>y>>n;
        if(x==y){
            cout<<"1"<<endl;
        }
        else{
            ll a=x xor y;
            if(a<n){
                cout<<"1"<<endl;
            }
            else{
                if(log(a)==log(n)){
                    if(n&(n-1)){
                        cout<<"2"<<endl;
                    }
                }
                else{
                    cout<<"-1"<<endl;
                }
            }
        }
        else{
            cout<<"-1"<<endl;
        }
    }

    }
    return 0;
}
```