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#include <iostream>
#include <cmath>

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using namespace std;

long long n,x,y,z,k,i,j,a,b,c,ok,p,u,f,t,jojo;

int main()
{
    for(f=1; f<=5; f++)
    {
        cin>>a>>b>>c>>x>>n;
        for(u=1; u<=n; u++)
        {
            cin>>y;
            jojo=x;
            ok=1;
            k=0;
            t=1;
            if(x<=6 and x+y>8)
            {
                ok=0;
                for(i=x+1; i<=x+y and t; i++)
                    if(i%y==0 and (i!=a and i!=b and i!=c) )
                        x=i,t=0;
            }
            else if(x<=11 and x+y>13)
            {
                ok=0;
                for(i=x+1; i<=x+y and t; i++)
                    if(i%y==0 and (i!=a and i!=b and i!=c) )

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        x=i,t=0;

    }
else if(x<=16 and x+y>18)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)
        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;
}
if(x<=26 and x+y>27)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)
        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;
}
else if(x<=34 and x+y>36)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)
        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;
}
else if(x<=39 and x+y>41)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)

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        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;

    }
else if(x<=44 and x+y>46)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)
        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;
}
else if(x<=49 and x+y>=51)
{
    ok=0;
    for(i=x+1; i<=x+y and t; i++)
        if(i%y==0 and (i!=a and i!=b and i!=c) )
            x=i,t=0;
}
if(ok==1)
{
    for(j=2; j*j<=x+y; j++)
        if((x+y)%j==0)
            k=1;
    if(k==0)
    {
        p=x+y;
        if(p!=a and p!=b and p!=c)
        {
            for(i=1; i<=6; i++)

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        if(p+1==a or p+1==b or p+1==c)
            break;
        else
            p=p+1,ok=0;
        x=p;
    }
}
}
if(ok==1)
{
    if(x+y>4 and sqrt(x+y)==(int)sqrt(x+y))
    {
        p=x+y;
        if(p!=a and p!=b and p!=c)
        {
            for(i=1; i<=6; i++)
                if(p-1==a or p-1==b or p-1==c)
                    break;
            else
                p=p-1,ok=0;
            x=p;
        }
    }
}
if(ok==1)
{
    p=x+y;
    if(p==a or p==b or p==c)
        x=p-y;
}

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    else
        x=p;
    }
    if(x>52)
        x=jojo;
    }
    if(x>=52)
        cout<<"GAME OVER"<<"\n";
    else
        cout<<x<<"\n";
    }
}
```