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/*
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Contest 4
*/

#include <math.h>
#include <iostream>
#include<string>
#include <bits/stdc++.h>

using namespace std;
int main()
{
    int arr[53] = {0};
    int pos1, pos2, pos3, posme, numd, di;
    cin >> pos1 >> pos2 >> pos3 >> posme >> numd;
    arr[pos1] = 1;
    arr[pos2] = 1;
    arr[pos3] = 1;
    arr[posme] = 2;
    for (int i = 0; i < numd; i++){
        cin >> di;
        //posorg = posme;
        posme = posme + di;
        //cout <<"org " << posme << endl;
        // cout <<"posorg " << posorg << endl;
        if (arr[posme] == 1 || posme > 52){
            posme = posme - di;

        }
        else if ((posme == 2) || (posme == 3) || (posme == 5) || (posme == 7)
) || (posme == 11) || (posme == 13) || (posme == 17) || (posme == 19)
|| (posme == 23) || (posme == 29) || (posme == 31) || (posme == 37)
|| (posme == 41) || (posme == 43) || (posme == 47))
        { //cout << "prime: " << posme << endl;
            for (int i = 0; i < 6; i++){
                if (arr[posme+1] == 0){
                    posme = posme + 1;

                }
            }
        }
        //i++;
    }
    else if (posme == 52){
        cout << "GAME OVER";
        return 0;
    }
}

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else if (posme == 9 || posme == 16 || posme == 25 || posme ==
36 || posme == 49)
{
    //cout <<"sq:"<< posme<< endl;
    for (int i = 0; i < 6; i++){
        if (arr[posme-1] == 0){
            posme = posme-1;

        }
    }
    //i++;

}
else if ((posme-di <= 6 && posme >= 8) || (posme-di <=11 && posme
>= 13 ) || (posme-di <=16 && posme >= 18 ) || (posme-di <= 21 && posme >=
23 ) || ( posme-di <=26 && posme >= 28 ) || ( posme-di <= 34 && posme >=
36) || ( posme-di <= 39 && posme >= 41) || ( posme-di <= 44 && posme >= 46
) || ( posme-di <= 49 && posme >= 51)){
    for (int i = posme-di+1; i <=posme; i++){
        if ((arr[i] == 0) && (i %di == 0)){
            // posme = posorg+1;
            //if ((posme-di != posme-di) && (posme-di %di == 0)){
                posme = i;
                //cout <<"9 "<<posme<<endl;
                break;
            }
        }
        else if(i==posme){posme=posme-di;}

    }
    //i++;
}
}
cout << posme<<endl;
}

```