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//Bogdan Dumitrescu

#include <iostream>
#include <vector>
#include <fstream>
#include <algorithm>

using namespace std;

ifstream in;
ofstream out;

bool pr[53], pp[53], oc[59];

vector<int> v;

void reg7(int pz,int m)
{
    int inc = v[pz];
    int sf = v[pz] + m;
    int ok = 1;
    for (int i = 1; i <= 6 and ok; i++)
    {
        sf++;
        if (oc[sf] == 1)
            ok = 0,sf--;
    }
    oc[inc] = 0;
    v[pz] = sf;
    oc[sf] = 1;
    if (sf == 52)
    {
        v.erase(v.begin() + pz, v.begin() + pz + 1);
        oc[52] = 0;
    }
}

void reg8(int pz, int m)
{
    int inc = v[pz];
    int sf = v[pz] + m;
    int ok = 1;
    oc[inc] = 0;
    for (int i = 1; i <= 6 and ok; i++)
    {
        sf--;
        if (oc[sf] == 1)
            ok = 0,sf++;
    }
    v[pz] = sf;
    oc[sf] = 1;
}

vector<int> urm = {
    0, 8, 8, 8, 8, 8, 8, 8,          // 0-6
    13, 13, 13, 13, 13,            // 7-11

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18, 18, 18, 18, 18, // 12-16
23, 23, 23, 23, 23, // 17-21
28, 28, 28, 28, 28, // 22-26
36, 36, 36, 36, 36, 36, 36, 36, // 27-34
41, 41, 41, 41, 41, // 35-39
46, 46, 46, 46, 46, // 40-44
51, 51, 51, 51, 51, // 45-49
-1, -1, -1, // 50-52
};
void reg9(int pz, int m)
{
    int inc = v[pz];
    int sf = v[pz] + m;
    if (sf < urm[v[pz]])
    {
        v[pz] = sf;
        oc[inc] = 0;
        oc[sf] = 1;
    }
    else
    {
        int k = sf / m;
        k *= m;
        int ok = 0;
        while (k >= inc and ok==0)
        {
            if (oc[k] == 0)
            {
                v[pz] = k;
                oc[inc] = 0;
                oc[k] = 1;
                ok = 1;
            }
            else
                k -= m;
        }
    }
}

int miscator()
{
    int min1 = 55, poz=-1;
    for (int i = 0; i < v.size(); i++)
        if (v[i] < min1)
            min1 = v[i], poz = i;
    return poz;
}

void refacere()
{
    v.clear();
    for (int i = 1; i <= 52; i++)
        oc[i] = 0;
}

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20+7+8+6=

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int a, b, c, n, m;
int main()
{
    pp[9] = pp[16] = pp[25] = pp[36] = pp[49] = 1;

    pr[2] = pr[3] = pr[5] = pr[7] = pr[11] = pr[13] = pr[17] = pr[19] =
pr[23] = pr[29] = 1;
    pr[31] = pr[37] = pr[41] = pr[43] = pr[47] = 1;
    oc[53] = oc[54] = oc[55] = oc[56] = oc[57] = oc[58] = 1;
    for (int z = 1; z <= 5; z++)
    {
        int ok1 = 1;
        cin >> a >> b >> c;
        oc[a] = oc[b] = oc[c] = 1;

        cin >> a >> b >> c;
        v.push_back(a);
        v.push_back(b);
        v.push_back(c);
        oc[a] = oc[b] = oc[c] = 1;

        cin >> n;
        for (int i = 1; i <= n; i++)
        {
            cin >> m;

            if (ok1)
            {
                int pz = miscator();
                if (v[pz] + m == 52)
                {
                    v.erase(v.begin() + pz, v.begin() + pz + 1);
                }
                else
                {
                    if (oc[v[pz] + m] == 0)
                    {
                        if (pr[v[pz] + m])
                        {
                            reg7(pz, m);
                        }
                        else
                        {
                            if (pp[v[pz] + m])
                            {
                                reg8(pz, m);
                            }
                            else
                            {
                                reg9(pz, m);
                            }
                        }
                    }
                }
            }
        }
    }
}

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        }
    }
    if (v.empty())
        ok1 = 0;
}
}
//out << v.size();
if (!v.empty())
{
    sort(v.begin(), v.end());
    for (int i = 0; i < v.size(); i++)
        cout << v[i] << " ";
    cout << endl;
}
else
    cout << "GAME OVER"<<endl;
refacere();
}
}
```