Adnan Fight Club

Problem

Submissions

Discussion Coming Soon

Just like a regular day at Beykoz Kundura, Adnan Sensei beats the inzva rookies till they cannot move anymore. He invents a system that will help to identify the wounded. Every rookie has a number written on them. Since inzva is a hacker society, Havva wants to automate the first aid system with 2 query types. The first query type is entering the current victim of Adnan Sensei to the system which is entering the number of the victim. The second query type is checking the wounded which is entering two numbers a and b, and checking if rookie a, rookie $a - b$, and rookie $a + b$ already got beaten or not. Help inzva automate the system.

Input Format

On the first line the number of queries, Q, will be given.

Each of the following Q lines has a query, which is formatted as:

- First type of query will be given as $1\ x$.
- Second type of the query will be given as $2\ a\ b$.

Output Format

For every second type query type, if rookie $a - b$, rookie a and rookie $a + b$ already got beaten, print `GG EZ`. Otherwise, print `GLHF`.

Constraints

- $3 \leq Q \leq 10^5$
- $1 \leq x, a, b \leq 10^9$

Sample Input 1

```
4
1 5
1 3
1 7
2 5 2
```

Sample Output 1

```
GG EZ
```

C++ (GCC 9.2.0) Bright

Memory Limit (kB) : 256000 **Time Limit (s) :** 1

```cpp
#include <bits/stdc++.h>
#include <unordered_map>
using namespace std;

int main() {
    int q;
    cin >> q;
    std::unordered_map<int, int> myMap;
    for(int i = 0; i < q; i++){
        int type;
        cin >> type;
        if (type == 1){
            int x;
            cin >> x;
            myMap[x]++;
```

```
        }
        else if (type == 2){
            int a, b;
            cin >>  a >> b;
            if(myMap.count(a) && myMap.count(a - b) && myMap.count(a + b))
                cout << "GG EZ" << endl;
            else
                cout << "GLHF" << endl;
        }
    }

    return 0;
}

```

Upload File

Test against custom test case

Run Code

Submit

Sample Test Case 0

Accepted

Input(stdin)

```
4
1 5
1 3
1 7
2 5 2
```

Output(stdin)

```
GG EZ

```

Expected Output

```
GG EZ
```