Counter game

```cpp
#include <bits/stdc++.h>

using namespace std;

string ltrim(const string &);
string rtrim(const string &);

/*
 * Complete the 'counterGame' function below.
 *
 * The function is expected to return a STRING.
 * The function accepts LONG_INTEGER n as parameter.
 */

string counterGame(long n) {
    bool louiseTurn=true;
    while(n!=1){
        long power=1;
        while(power*2<=n){
            power*=2;
        }
        if(power==n){
            n=n/2;
        }
        else{
            n=n-power;
        }
        louiseTurn =!louiseTurn;
    }
    if(louiseTurn){
        return "Richard";
    }
    else{
        return "Louise";
    }
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string t_temp;
    getline(cin, t_temp);
```

```cpp
    int t = stoi(ltrim(rtrim(t_temp)));

    for (int t_itr = 0; t_itr < t; t_itr++) {
        string n_temp;
        getline(cin, n_temp);

        long n = stol(ltrim(rtrim(n_temp)));

        string result = counterGame(n);

        fout << result << "\n";
    }

    fout.close();

    return 0;
}

string ltrim(const string &str) {
    string s(str);

    s.erase(
        s.begin(),
        find_if(s.begin(), s.end(), not1(ptr_fun<int,
int>(isspace)))
    );

    return s;
}

string rtrim(const string &str) {
    string s(str);

    s.erase(
        find_if(s.rbegin(), s.rend(), not1(ptr_fun<int,
int>(isspace))).base(),
        s.end()
    );

    return s;
}
```