

Counter game

```
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int isPow2(long unsigned int);
long unsigned int largePow(long unsigned int);

int main() {
    /* Enter your code here. Read input from STDIN. Print
    output to STDOUT */
    int t, i, win;
    long unsigned int n;

    scanf("%d", &t);

    for(i = 0; i < t; ++i) {
        win = 0;
        scanf("%lu", &n);

        if(n == 1)
            printf("Richard\n");
        else {
            while(n != 1) {
                if(isPow2(n))
                    n >>= 1;
                else
                    n -= largePow(n);
                ++win;
            }

            if(win % 2 == 0)
                printf("Richard\n");
            else
                printf("Louise\n");
        }

        return 0;
    }

    int isPow2(long unsigned int n) {
        return !(n & (n - 1));
    }

    long unsigned int largePow(long unsigned int n) {
```

```
long unsigned int m = 0;

while(n) {
    m = n;
    n &= (n - 1);
}

return m;
}
```