

# Heap Split



Richard and Louise have with them a heap of  $N$  counters. Richard goes first and splits the heap into two non-empty heaps and they alternate their turns henceforth. The person who is unable to split the heap any further loses.

Given  $N$ , your task is to let us know who wins.

## Input Format

The first line of the input contains  $T$ , the number of test cases.  $T$  lines follow.  
Each line contains the number  $N$ .

## Constraints

$$1 \leq T \leq 10$$
$$2 \leq N \leq 10^8$$

## Output Format

Print **Richard** if Richard wins the game and **Louise** otherwise.

### Sample Input #00

```
1
2
```

### Sample Output #00

```
Richard
```

### Explanation #00

Richard splits the heap of size 2 into two heaps of size 1. Louise cannot split the heaps any further. Hence, Richard wins.

### Sample Input #01

```
1
3
```

### Sample Output #01

```
Louise
```

### Explanation #01

Richard can only split the heap of size 3 into two heaps of size 2 and 1 respectively. Louise can then split the heap of size 2 into two heaps of size 1. Hence, Louise wins.