

## As the Gear Turns

Program Name: gear.java

Input File: gear.in

Gears are numbered 1 to 9. If a gear turns in the clockwise direction, the gears to the left and right of it turn counter-clockwise. Conversely, if a gear turns in the counter-clockwise direction, the gears to the left and right of it turn clockwise.

### Input

The first line will contain a single integer  $n$  indicating the number of datasets. Each dataset will consist of 2 components:

4. The first line will contain a sequence of nine gears, separated by spaces. The gears will be numbered from 1 to 9.
5. The next line contains the direction (“CLOCKWISE” or “COUNTER-CLOCKWISE”) of gear 1.

### Output

For each dataset, display “CLOCKWISE” or “COUNTER-CLOCKWISE” depending on the direction of gear 9.

### Example Input File

```
3
3 2 9 1 6 5 4 7 8
CLOCKWISE
4 6 2 1 8 9 3 5 7
CLOCKWISE
1 2 3 7 8 9 6 5 4
COUNTER-CLOCKWISE
```

### Example Output To Screen

```
COUNTER-CLOCKWISE
CLOCKWISE
CLOCKWISE
```