

Problem K. K

Time limit 1000 ms
Mem limit 262144 kB

Codeforces separates its users into 4 divisions by their rating:

- For Division 1: $1900 \leq \text{rating}$
- For Division 2: $1600 \leq \text{rating} \leq 1899$
- For Division 3: $1400 \leq \text{rating} \leq 1599$
- For Division 4: $\text{rating} \leq 1399$

Given a rating, print in which division the rating belongs.

Input

The first line of the input contains an integer t ($1 \leq t \leq 10^4$) — the number of testcases.

The description of each test consists of one line containing one integer rating ($-5000 \leq \text{rating} \leq 5000$).

Output

For each test case, output a single line containing the correct division in the format "Division X", where X is an integer between 1 and 4 representing the division for the corresponding rating.

Examples

Input	Output
7	Division 4
-789	Division 4
1299	Division 4
1300	Division 4
1399	Division 3
1400	Division 2
1679	Division 1
2300	

Note

For test cases 1 – 4, the corresponding ratings are -789 , 1299 , 1300 , 1399 , so all of them are in division 4.

For the fifth test case, the corresponding rating is 1400 , so it is in division 3.

For the sixth test case, the corresponding rating is 1679 , so it is in division 2.

For the seventh test case, the corresponding rating is 2300 , so it is in division 1.