Problem L. L

Time limit 1000 ms

Mem limit   262144 kB

Codeforces separates its users into 4 divisions by their rating:

- For Division 1: $1900 \leq$ rating
- For Division 2: $1600 \leq$ rating ≤ 1899
- For Division 3: $1400 \leq$ rating ≤ 1599
- For Division 4: rating ≤ 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 $(-5000 \leq$ 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 -789 1299 1300 1399 1400 1679 2300	Division 4 Division 4 Division 4 Division 4 Division 3 Division 2 Division 1

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.