Problem A. Number Theory Problem

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Input file:     Standard Input
Output file:    Standard Ouptut
Time limit:     1 second
```

Mr. Panda is one of the top specialists on number theory all over the world.

Now Mr. Panda is investigating the property of the powers of 2. Since 7 is the lucky number of Mr. Panda, he is always interested in the number that is a multiple of 7.

However, we know that there is no power of 2 that is a multiple of 7, but a power of 2 subtracted by one can be a multiple of 7. Mr. Panda wants to know how many positive integers less than 2^N in the form of $2^k - 1$ (k is a positive integer) that is divisible by 7. N is a positive interger given by Mr Panda.

Input

The first line of the input gives the number of test cases, T. T test cases follow.

Each test case contains only one positive interger N.

Output

For each test case, output one line containing "`Case #x: y`", where `x` is the test case number (starting from `1`) and `y` is the answer.

Limits

- $1 \leq T \leq 100$.
- $1 \leq N \leq 10^5$.

Sample input and output

Sample Input	Sample Output
2 1 4	Case #1: 0 Case #2: 1