## Seconds Apart

You will be given time duration in seconds, you have to convert it into years, months, days, hours, minutes and seconds.

You can assume that, 1 year $=12$ months, 1 month $=30$ days, 1 day $=24$ hours, 1 hour $=60$ minutes and 1 minute $=60$ seconds.

##  

##   

## Input

The first line contains the number of test cases $\mathrm{T}(\mathrm{T} \leq 50)$. Then T lines follow, each containing a positive integer $S$, the number of seconds ( $1 \leq S \leq 10^{\wedge} 9$ ).

## Output

For each test case print the case number first as shown in sample input/output section. Then you have to print the number of years, months, days, hours, minutes and seconds in this order. If any of these terms is 0 , do not print it, if any of these term has a magnitude $>1$, print the unit in plural form, otherwise, print it in singular form. For example, there must not be any term as 0 minutes; you must skip the minute part for such situations. Also, for a year value 1 , you have to print 1 year, not 1 years, and for 10 months, you have to print 10 months, not 10 month. Check sample input and output for more details.












## Example

Input:
6
1
59
60
395
3840305
31104000

## Output:

Case 1: 1 second
Case 2: 59 seconds
Case 3: 1 minute
Case 4: 6 minutes 35 seconds
Case 5: 1 month 14 days 10 hours 45 minutes 5 seconds
Case 6: 1 year

