Slope Day Countdown

Problem ID: slopedaycountdown

Slope Day is an annual day of celebration held at Cornell University the Thursday after the last day of undergraduate classes, and it includes live music and catered food.

Slope Day is coming, and you just can't wait to see your favorite artists play. You don't want to miss a thing! To help you be the very first person to arrive, you set up a countdown timer that shows how many seconds are there until Slope Day starts. However, as you quickly realized, displays like "314159 seconds" aren't very intuitive. So you decide to upgrade it to a more human-readable version. The logic you have in mind can be described as follows:

If there are 0 seconds left, the program should print "NOW".

If there are fewer than 60 seconds left, the program should print " $s_$ seconds" where s is the number of seconds left without leading zeros.



If there are fewer than 3600 seconds left, the program should print "m_minutes_s_seconds" where m is the number of minutes left and s is the number of seconds left after m minutes.

If there are fewer than 86400 seconds left, the program should print "h_hours_m_minutes_s_seconds" where h, m, and s are the number of hours, minutes, and seconds left respectively.

Otherwise, the program should print "d_days_h_hours_m_minutes_s_seconds" where d represents the number of days left and other variables the same as above.

Input

The input contains single line with a single integer T, $0 < T < 10^9$, the number of seconds before Slope Day.

Output

Print a single line in the format described in the problem statement. DO NOT print extra whitespaces.

Sample Input 1	Sample Output 1
59	59 seconds
Sample Input 2	Sample Output 2
3603	1 hours 0 minutes 3 seconds
Sample Input 3	Sample Output 3
0	NOW