Time Conversion

Time limit: 1s
Memory Limit: 8MB

You will be given a number X that are shown in a digital stopwatch. That number means X seconds has elapsed since the digital stopwatch was started. You need to output the time elapsed in a nicer format, D days, H hours, M minutes, and S seconds.

Input

The first line will have the number X ($1 \le X \le 700.000$) described above.

Output

You need to output the time elapsed in a nicer format given above. See the sample inputs and outputs for clarity. **REMEMBER!** If you output unnecessary character(s), the system will give you "Wrong Answer" instead of "Correct".

1st Sample Input
2
Output for 1st Sample Input
0 days, 0 hours, 0 minutes, 2 seconds.

2nd Sample Input
3600
Output for 2nd Sample Input
0 days, 1 hours, 0 minutes, 0 seconds.

3rd Sample Input
666278

Output for 3rd Sample Input
7 days, 17 hours, 4 minutes, 38 seconds.

Note: Always print a newline (\n) at the end of the answer.