

After successfully conquering the South Pole, Davor is preparing for new challenges. Next up is the Arctic expedition to Siberia, Greenland and Norway. He begins his travels on 31 December 2018, and needs to collect N kunas (Croatian currency) by then. In order to do this, he has decided to put away X ($X \leq 100$) kunas every Monday to his travel fund, $X + K$ kunas every Tuesday, $X + 2 \cdot K$ every Wednesday, and so on until Sunday, when he will put away $X + 6 \cdot K$ kunas. This way, he will collect money for 52 weeks, starting with 1 January 2018 (Monday) until 30 December 2018 (Sunday).

If we know the amount of money N , output the values X and K so that it is possible to collect the **exact** money amount in the given timespan. The solution will always exist, and if there are multiple, output the one with the greatest X and smallest K .

INPUT

The first line of input contains the integer N ($1456 \leq N \leq 145600$), the number from the task.

OUTPUT

The first line of output must contain the value of X ($0 < X \leq 100$), and the second the value of K ($K > 0$).

SAMPLE TESTS

input	input	input
1456	6188	40404
output	output	output
1	14	99
1	1	4