C   Treasure

Jimmy recently found a treasure "map" (an integer N). After much thinking, he's realized how to decode N to find the location of the treasure.

The scheme is as follows: starting at $(0,0)$, he must divide N by 4 (integer division) and act based on the remainder. If it's 0 - go North, 1 - go East, 2 - go South, 3 - go West. Jimmy must then repeat this with the quotient until he gets 0, after which he has found the correct location.

Please help Jimmy decode his map and find the treasure!

SHORT NAME: `treasure`

INPUT FORMAT:
The first line of input contains the integer N, the map number. $(1 \leq N \leq 10^5)$

OUTPUT FORMAT:
Output two integers separated by a comma and a space which represent the location of the treasure.

SAMPLE INPUT:

5

SAMPLE OUTPUT:

2, 0

$5 \div 4$ has a remainder of 1, so he must go east. The quotient, after integer division, is also 1.
$1 \div 4$ has a remainder of 1, so he must again go east. The quotient is 0, so he's done.