

Slavko decided to challenge Mirko! He gave him a real number **P** and a bag full of pieces of paper with exactly one number 1-5 written on each paper. There is an unlimited quantity of each type of paper.

Mirko's task is to pick **the minimum number of papers** in a way that the average of the numbers written on them equals exactly **P**.

INPUT

First and only line of input contains real number **P**.

P will have between 1 and 9 decimal places, inclusive ($1 \leq P \leq 5$).

OUTPUT

First and only line of output should contain five nonnegative integers - numbers of ones, twos, threes, fours and fives used, respectively. **If there are multiple solutions, output any one of them.**

SAMPLE TESTS

input 5.0	input 4.5	input 3.20
output 0 0 0 0 1	output 0 0 0 1 1	output 0 0 4 1 0