



# Fractions to Decimals

Write a program that will accept a fraction of the form  $N/D$ , where  $N$  is the numerator and  $D$  is the denominator and print the decimal representation. If the decimal representation has a repeating sequence of digits, indicate the sequence by enclosing it in brackets. For example,  $1/3 = .33333333\dots$  is denoted as  $0.(3)$ , and  $41/333 = 0.123123123\dots$  is denoted as  $0.(123)$ . Use  $xxx.0$  to denote an integer. Typical conversions are:

$1/3 = 0.(3)$   
 $22/5 = 4.4$   
 $1/7 = 0.(142857)$   
 $2/2 = 1.0$   
 $3/8 = 0.375$   
 $45/56 = 0.803(571428)$

**PROGRAM NAME:** fracdec

## INPUT FORMAT

A single line with two space separated integers,  $N$  and  $D$ ,  $1 \leq N, D \leq 100000$ .

**SAMPLE INPUT (file fracdec.in)**

45 56

## OUTPUT FORMAT

The decimal expansion, as detailed above. If the expansion exceeds 76 characters in length, print it on multiple lines with 76 characters per line.

**SAMPLE OUTPUT (file fracdec.out)**

0.803(571428)

**Submit a solution:**

No file chosen

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