

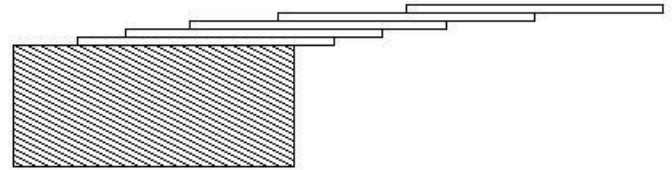


JAVA programmers: your program name must be: prob05.class

C programmers: your program name must be: prob05.exe

Task Description

How far can you make a stack of cards overhang the edge of a table? If you have one card, you can create a maximum overhang of half a card length. (We're assuming that the cards must be perpendicular to the table.) With two cards you can make the top card overhang the bottom one by half a card length, and the bottom one overhang the table by a third of a card length, for a total maximum overhang of $1/2 + 1/3 = 5/6$ card lengths. In general you can make n cards overhang by $1/2 + 1/3 + 1/4 + \dots + 1/(n + 1)$ card lengths, where the top card overhangs the second by $1/2$, the second overhangs the third by $1/3$, the third overhangs the fourth by $1/4$, etc., and the bottom card overhangs the table by $1/(n + 1)$. This is illustrated in the figure at right.



Program Input

The input is a single line containing a positive floating-point number c (representing the desired overhang in card lengths) whose value is at least 0.01 and at most 5.20; it will contain exactly three digits.

Program Output

Output the minimum number of cards necessary to achieve an overhang of at least c card lengths. Use the exact output format shown in the examples.

Sample Input/Output

```
Enter overhang > 1.00  
3 card(s)
```

```
Enter overhang > 3.71  
61 card(s)
```

```
Enter overhang > 0.04  
1 card(s)
```

```
Enter overhang > 5.19  
273 card(s)
```