**Siena College’s 32nd Annual** **High School Programming Contest**

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##### **March 29, 2019**

###### Gold Problem #1:  Kitchen Conversions

Background Information:  Professional and amateur cooks as well as food connoisseurs frequently need to convert between various kitchen units. You have a plan to develop a full-fledged cooking app. However, you are participating in a programming contest and cannot get started until later tonight. But as luck would have it, this problem will help get you started. You will write a program that will do some basic conversions. The following relationships may be helpful.

1. 3 teaspoons in 1 tablespoon
2. 16 tablespoons in 1 cup
3. 2 cups in 1 pint
4. 2 pints in 1 quart
5. 4 quarts in 1 gallon

For this problem, all conversions will result in

integer values. For example: your program will

convert 19 teaspoons to 6 tablespoons (not 6.33).

Your program will input a positive integer N followed by two by strings S and T from the set:

{TEASPOONS, TABLESPOONS, CUPS, PINTS, QUARTS, GALLONS}

and output K which is the conversion of N units of S into K units of T. For tonight, conversions should use integer division (see problem 1). Also, unit S will be not be the same as unit T.

###### Programming Problem:

Input:  N, S, and T on one line, each separated by one space (as described above).

N will be ≤ 50,000.

Output: K (an integer as described above)

###### Example 1: Input:  3 GALLONS QUARTS

###### Output:  12

###### Example 2: Input:  35 QUARTS GALLONS

###### Output:  8

###### Example 3: Input:  101 CUPS QUARTS

###### Output:  25

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