Love Percentage

Happy Valentines Day !!!

Suppose , you are "sojib" and you have a serious crush on "srity" . Recently , One of the students of ICE department,NSTU has developed an application which can calculate love percentage. So, there is an opportunity to calculate the love percentage between you and your crush . There are some rules for the caculation described below :

1. There are two strings of same length n each containing lower-case distinct letters .

2. The formula for the calculation : (100/n)*p ; such that p = the number of common letters between the strings .

Input: The first line of the input contains an integer T indicating test cases . Each test case contains two strings .

Output: For each test case , Print the quantity of the love percentage R which is a real number . Print two digits after the decimal point with the notaion "%" .

Input Format

7

sojib

srity

akid

idka

taskin

inapse

shuvo

huovp

shawon

hapqrt

shanto

psanto

shifa

ifsha

Constraints

1<=n<=25 1<=T<=100

Output Format

40.00%

100.00%

66.67%

80.00%

33.33%

83.33%

100.00%

Problem Setter: Mohammed Shamim

Problem Tester: Asaduzzaman Nur Shuvo