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| H | **A Change in Thermal Unit** |

Measuring temperature and temperature differences are common task in many research and applications. Unfortunately, there exists more than one unit of measuring temperatures. This introduces a lot of confusion at times. Two popular units of measurements are Celsius(**C**) and Fahrenheit (**F**). The conversion of **F** from **C** is given by the formula:

http://uva.onlinejudge.org/external/119/p11984.png

In this problem, you will be given an initial temperature in **C** and an increase in temperature in **F**. You would have to calculate the new temperature in **C**.

**Input**

Input starts with an integer **T (≤ 100)**, denoting the number of test cases.

Each case contains a line with two integers **C** and **d (0 ≤ C, d ≤ 100)**, where **C** represents the initial temperature in Celsius and **d** represents the increase in temperature in Fahrenheit.

**Output**

For each case, print the case number and the new temperature in Celsius after rounding it to two digits after the decimal point.

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| **Sample Input** | **Output for Sample Input** |
| 2  100 0  0 100 | Case 1: 100.00  Case 2: 55.56 |

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