DEEPIKA AND HER BANK ACCOUNT

Ranbir has deposited some money in Deepika's account. Deepika would like to withdraw x \$US from an ATM. The ATM machine will only accept the transaction if x is a multiple of 10, and Deepika's account balance has enough cash to perform the withdrawal transaction (including bank charges). For each successful withdrawal the bank charges 0.50 \$US.

Calculate Deepika's account balance after an attempted transaction.

Input

The first like contains T (T<20), the number of Test cases followed by T line containing X and Y each.

Positive integer 0 < X <= 2000 - the amount of cash which Deepika wishes to withdraw.

Nonnegative number 0<= Y <= 2000 with two digits of precision - Deepika's initial account balance.

Output

Output the account balance after the attempted transaction, given as a number with two digits of precision. If there is not enough money in the account to complete the transaction, output the current bank balance.

Example

Input:

2 30 120.00 42 120.00

Output:

89.50 120.00