**Make Change**



After a person selects an item from a vending machine, the machine accepts a deposit of coins and/or paper money. If the price of the selected item is less than the deposit, the machine returns change to the user.  The machine may use any combination of coins that equals the deposit. For U.S. currency, coins of 0.05, 0.10, 0.25, and 1.00 denominations are returned.

Task

Write a program that:

1. Accepts a price and deposit amount.
2. Computes and writes out the quantity of each type of coin to be returned. The total number of coins is to be minimized; for example, return three 0.25 coins, not seven 0.10 and one 0.05 coins. Assume there are always enough coins to make change for the allowed inputs.

Input

The input is two integers, separated by a space.  The first number is the price.  The second number is the deposit.

Owing to the absence of built-in money or decimal types in many languages, all amounts (input and output) are represented with positive integers.  A valid amount is in the range 0 to 1000 (representing $0.00 to $10.00). All amounts must be evenly divisible by 5.

The input is submitted by an end-of-line (e.g., pressing the Enter key.)

Output

Subtract the deposit from the price to determine the return amount. Determine the minimum number of coins needed to equal the return amount.  Output the following five numbers, each separated with a space:

If  the input does not follow any of the above requirements, output only the string “ERROR”.

Example

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Note (reference only)** |
| 55 100 | 0 1 2 0 |  |
| 85 75 | ERROR | Price is less than deposit |
| 99 100 | ERROR | Price not a multiple of 5 |
| 25 | ERROR | Missing input |