

2610 Change Back

Modern grocery stores now often have a “U-Scan” checkout lane - allowing the customer to scan and check out his/her own groceries, without the need of a human checker. These lanes require that change be provided automatically, after the customer enters his/her cash. You are to write a program that computes the bills and coins to be dispensed, minimizing the total number of bills and coins. (That is, for change totaling \$5.50, you should not dispense 5 ones and 50 pennies, but a \$5 bill and a 50-cent piece.)

The bills and coins available for you to dispense are as follows:

- \$50 bill,
- \$20 bill,
- \$10 bill,
- \$5 bill,
- \$1 bill,
- 50-cent coin,
- 25-cent coin,
- 10-cent coin,
- 5-cent coin,
- 1-cent coin.

Input

The input file will consist of two numbers per line, each constituting a transaction. The first number is the amount of the purchase, and the second one is the amount tendered by the customer. You may assume that the amount tendered is greater than or equal to the amount of purchase. Input will be terminated by a line with both numbers being 0.

Output

Output for each transaction will be a series of lines showing the amount of change returned and detailing the number of bills and coins that will be dispensed as change, in descending order of monetary amount, one unit per line. If a bill/coin is not needed in the change returned, no output is produced for that bill/coin. (In other words, do not display ‘0 \$1 bills’.) Proper use of plurals is required, as shown below.

Separate transactions by a blank line.

Sample Input

```
42.15 50.00
2.07 5.00
99.99 100.00
0.0 0.0
```

Sample Output

```
TRANSACTION #1:
$7.85
1 $5 bill
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2 \$1 bills
1 50-cent coin
1 25-cent coin
1 10-cent coin

TRANSACTION #2:

\$2.93

2 \$1 bills
1 50-cent coin
1 25-cent coin
1 10-cent coin
1 5-cent coin
3 1-cent coins

TRANSACTION #3:

\$0.01

1 1-cent coin