

12

The simplest ATM

8 points

Introduction

You have been asked to write a program for a simple ATM (for “automatic teller machine”, a machine that lets you withdraw money from your bank account using a credit/debit card). This ATM has the following rules:

- Only 5-euro notes are available. This means that transactions are only accepted if the desired quantity is a multiple of 5.
- Each transaction has a fee of 0.50 euros that must be deducted.
- If a transaction is not possible, the account balance will remain the same.

Input

The first line of the program will be the initial balance of the account (less than 1000 euros) and a series of transactions, ending with a zero.

```
120.0
40.0
32.0
20.0
80.0
0
```

Output

The program must output the enquiry and the final status of the balance after each transaction, one line each.

```
40.0 79.50
32.0 79.50
20.0 59.00
80.0 59.00
```

Detailed explanation

The first result is 79.50 which is $120.00 - 40.00 - 0.50$ (fee) = 79.50

The second result is still 79.50 because 32 is not a multiple of 5 and, therefore, the transaction is not valid.

The third result is the result of a 20 euros valid transaction: $79.50 - 20.00 - 0.50 = 59.00$

The fourth result is still 59.00 because there are no funds for a 80.00 euro transaction.