Problem 1

The Ledger Co

All Geektrust challenges are meant to be solved offline. Your score will be such as OOPS, readability, and scalability.

You should read what we look for in your solution before you start coding the right output.

Please go through the build instructions here

The challenge

You work at a startup called The Ledger Co., a marketplace for banks to le receive payments for the loans.

The interest for the loan is calculated by I = P*N*R where P is the principa years and R is the rate of interest. The total amount to repay will be A = P

The amount should be paid back monthly in the form of EMIs. The borrow (that is, an amount more than their monthly EMI). In such a case, the lump the total amount (A) which can reduce the number of EMIs. This doesn't a

Your program should take as input:

1. The bank name, borrower name, principal, interest and term.
2. Lump sum payments if any.
3. Given the bank name, borrower name, and EMI number, the program sh
paid by the user (including the EMI number mentioned) and the remaining

The output should be
1. Amount paid so far, and number of EMIs remaining for the user with the

Input Commands

There are 3 input commands defined to separate out the actions. Your inp
either of these commands i.e LOAN, PAYMENT, BALANCE

LOAN

The LOAN command receives a Bank name, Borrower name, Principal Am
period and the Rate of Interest along with it.

Format - LOAN BANK_NAME BORROWER_NAME PRINCIPAL NO_OF_
Example- LOAN IDIDI Dale 10000 5 4 means a loan amount of 10000 is p
tenure of 5 years at 4% rate of interest.

PAYMENT

after 5 EMI payments.

BALANCE

The BALANCE command receives a Bank name, Borrower name and a EM
prints the total amount paid by the borrower, including all the Lump Sum a
EMI number, and the no of EMIs remaining.

Input format - BALANCE BANK_NAME BORROWER_NAME EMI_NO
Example - BALANCE MBI Harry 12 means - print the amount paid includi
remaining for user Harry against the lender MBI.

Output format - BANK_NAME BORROWER_NAME AMOUNT_PAID NO
Example - MBI Harry 1250 43

Assumptions

1. Repayments will be paid every month as EMIs until the total amount is r

2. Lump sum amounts can be paid at any point of time before the end of te

3. The EMI amount will be always ceiled to the nearest integer. For examp
87 and 100.10 to 101.

4. The no of EMIs should be ceiled to the nearest whole number. For exam
and 23.1 will also be ceiled to 24.

payments until that number. For example if there was a lump sum paymen
the balance command for EMI number 10 should include the lump sum pa

SAMPLE INPUT-OUTPUT 1

INPUT:

```
LOAN IDIDI Dale 10000 5 4
LOAN MBI Harry 2000 2 2
BALANCE IDIDI Dale 5
BALANCE IDIDI Dale 40
BALANCE MBI Harry 12
BALANCE MBI Harry 0
```

OUTPUT:

```
IDIDI Dale 1000 55
IDIDI Dale 8000 20
MBI Harry 1044 12
MBI Harry 0 24
```

SAMPLE INPUT-OUTPUT 2

INPUT:

```
LOAN IDIDI Dale 5000 1 6
LOAN MBI Harry 10000 3 7
LOAN UON Shelly 15000 2 9
PAYMENT IDIDI Dale 1000 5
PAYMENT MBI Harry 5000 10
PAYMENT UON Shelly 7000 12
```

OUTPUT:

IDIDI Dale 1326 9
IDIDI Dale 3652 4
UON Shelly 15856 3
MBI Harry 9044 10

Before you get started, please check the below:

1. Help docs to help you get a good score.
2. Key badges to earn.
3. Build instructions before submitting your code.

Note: When testing your code, make sure your program reads input from the program as a command line argument. And output should be printed t