Code test - Mortage plan

The new customer centric bank Money Bin Inc. in Duckburg would like to have new product on the market. For that they need your help! There is a demand from their customers that they want to be able to borrow money and get to know the exact amount they have to pay each month over a period of time.

The CEO of the bank has given the requirement like this:

> *"Given a total loan of X € and a fixed yearly interest rate of Y %. The customer wants to pay the same amount each month for Z years. How much should the customer pay each month to pay off the whole debt?"*

Your task is to create a Java application that reads the attached file and print out the result for each customer given the formula below.

Output for each customer in file:

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Prospect 1: *CustomerName* wants to borrow *X* € for a period of *Z* years and pay E € each month

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Requirements

- Code in a standalone project on GitHub (or similar) that we can access
- A build tool used to compile, build, test and run project
- Readme of how to start the application
- Unit test for testing application logic
- Usage of java.math or similar math dependencies are not allowed

Optional

- Add a database to be used where the prospects are stored instead of the file
- Create a web interface where the user can enter all required information for the calculation

Mortage formula:

E = Fixed monthly payment

b = Interest on a monthly basis

U = Total loan

p = Number of payments

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E = U[b(1 + b)^p]/[(1 + b)^p - 1]
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