PRG281 Project

User Manual

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Prime Rate

When the C# application is run, the user is prompted to enter the prime interest rate. This will be used to determine the interest, which will be used to calculate the total amount owed from the loan. The prime interest rate will only be entered once (here at the beginning of the application).

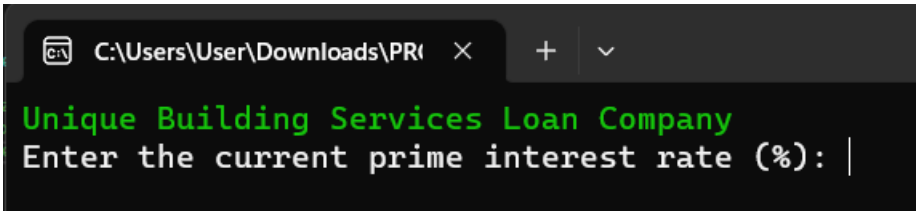

Figure 1 Prime Rate

Prime Rate Validation

When the user enters the prime rate, it must just be the number. No special characters or letters must be included. Validation has been implemented to ensure that users only enter numbers. If the user enters anything that is not numbers, the following error message appears until the user enters a valid number.

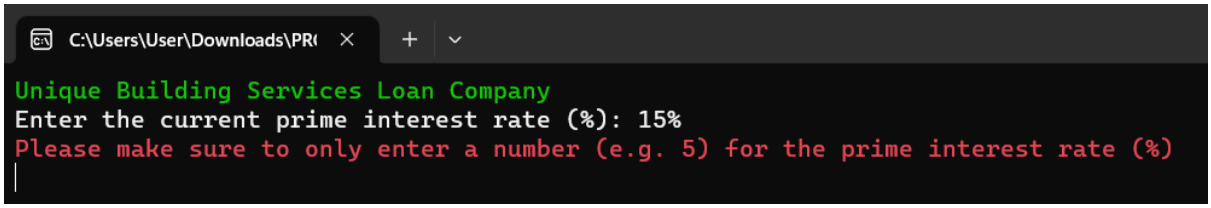

Figure 2 Prime Rate Validation

The user can then enter a valid number:

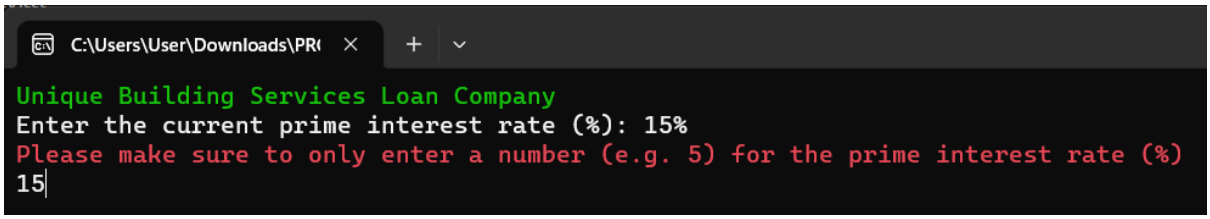

Figure 3 Prime Rate Validation Correction

If the user enters a valid number, the console is cleared, and the user can start entering information about the loan.

Creating the loans

Users will be asked to enter the information for five loans. First, they will have to select a loan type, either a business loan or a personal loan.

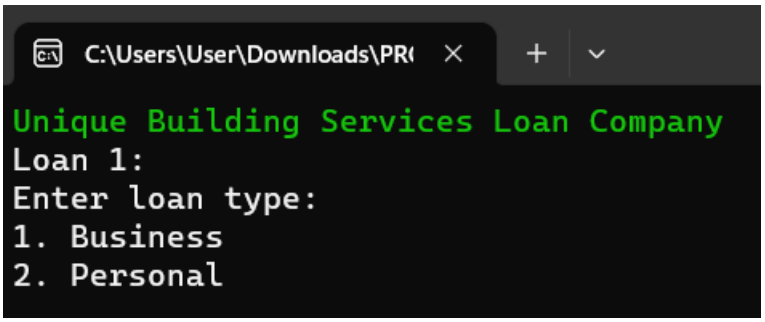

Figure 4 Loan Type

Loan type validation

The user must enter either number 1 or 2. If the user enters anything other than this, an error message will display asking for a valid choice until the user has entered either a 1 or 2.

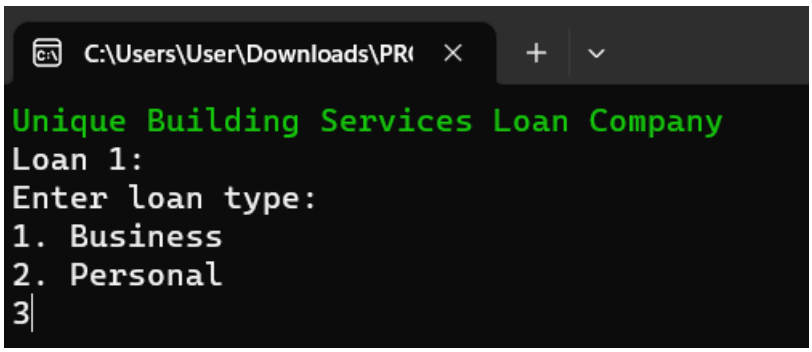

Figure 5 Loan Type Choice

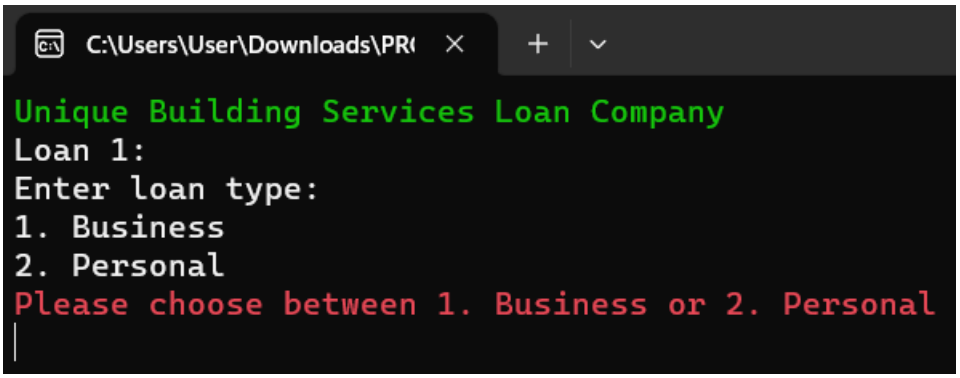

Figure 6 Loan Type Validation

Once the user has made a valid selection, they can enter other information such as the loan number, their last name and first name. Thereafter, they will need to enter the amount that they want to loan.

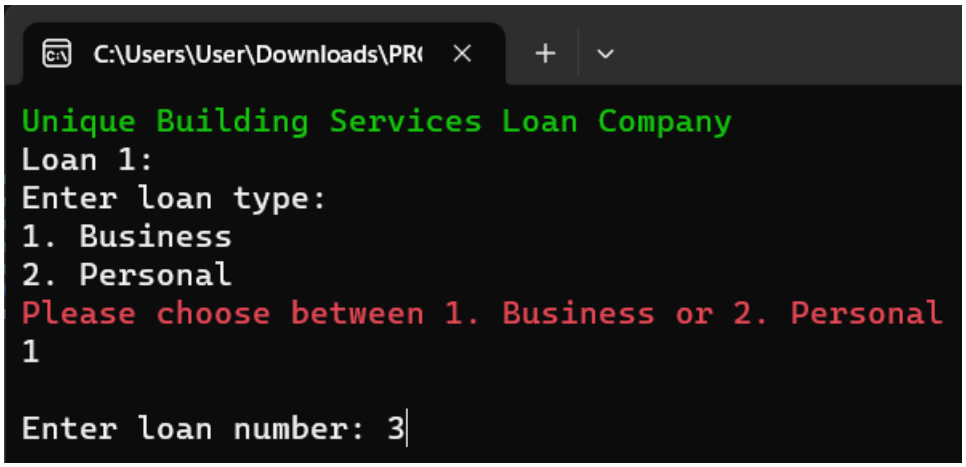

Figure 7 Loan Number

Last Name and first name validation

We validate the first and last name to only allow alphabet letters, spaces (for second names or some surnames), apostrophes or hyphens. If some text is entered which is not one of these options, the program will prompt the user to type in their first or last name that only contains those letters or characters and will only continue once the correct input has been received.

Last Name Validation

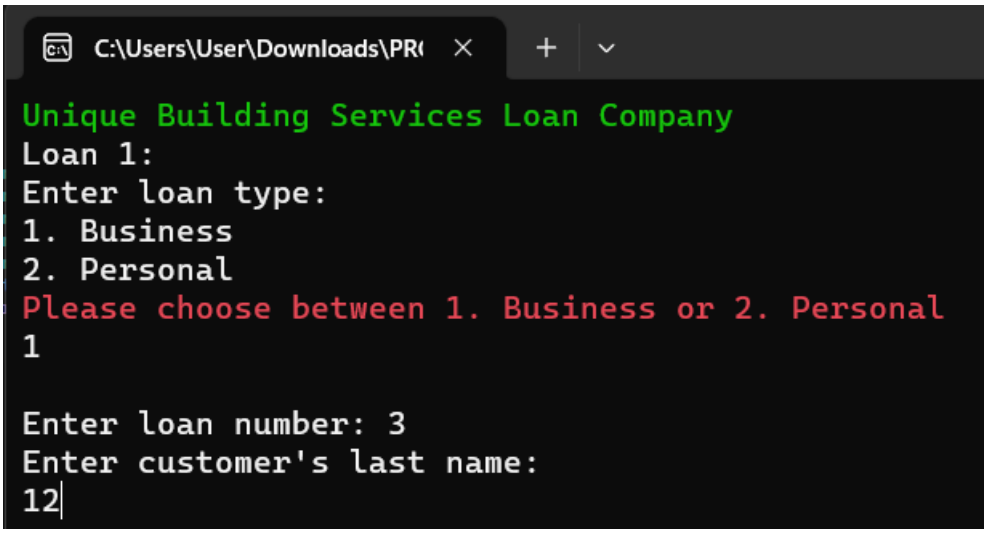

Figure 8 Customer Last Name

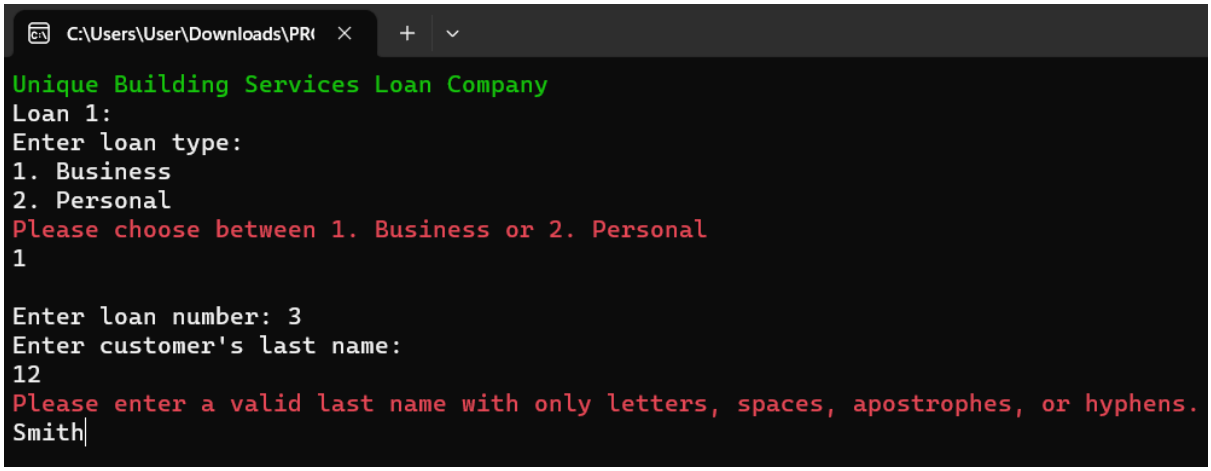

Figure 9 Customer Last Name Validation

First Name Validation

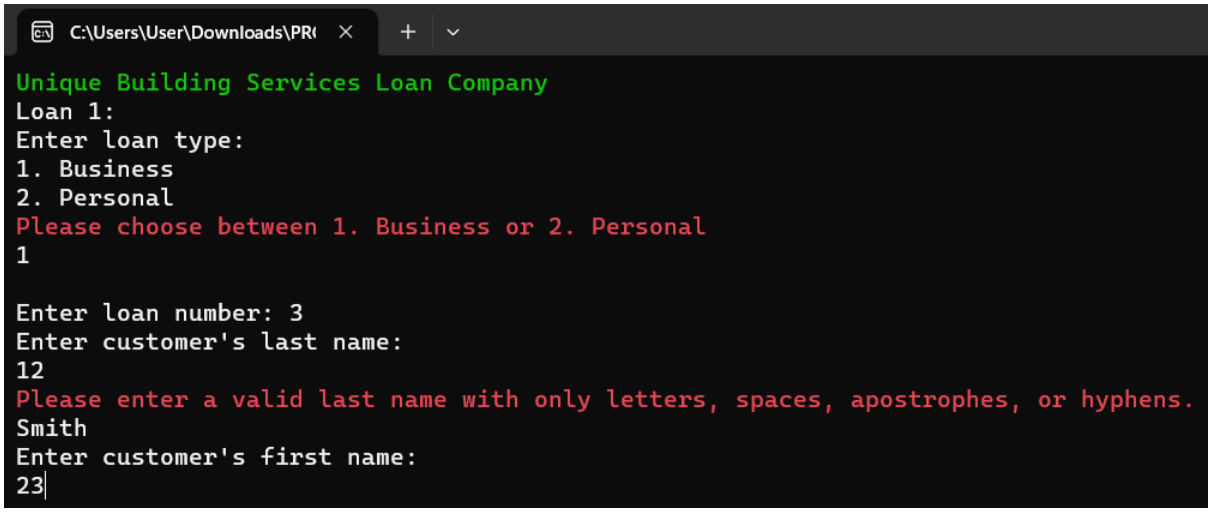

Figure 10 Customer First Name

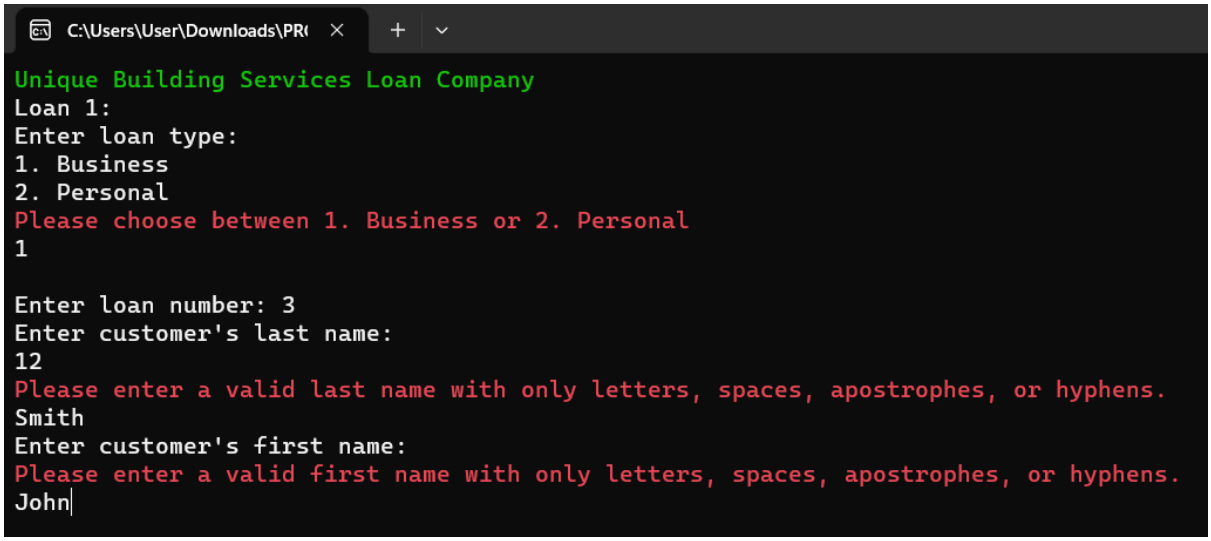

Figure 11 Customer First Name Validation

Loan amount validation

If the user enters a loan amount of more than R100 000, an error message will appear as follows:

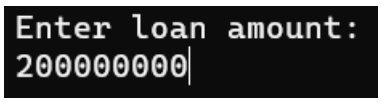

Figure 12 Loan Amount

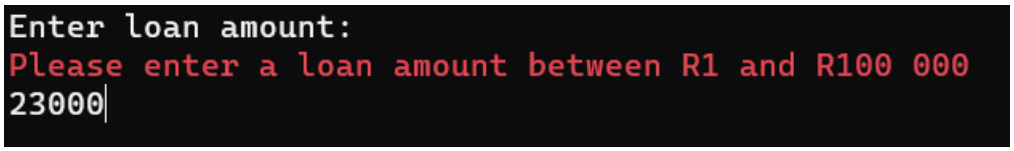

Figure 13 Loan Amount Validation

This message will continue to appear until the user has entered a valid loan amount.

Loan Term Validation

Next, the user must select a loan term. This can either be a short term, which is one year, a medium term which is 3 years or long term which is 5 years.

In the case that the user does not enter a valid option, the program will default the term to short term.

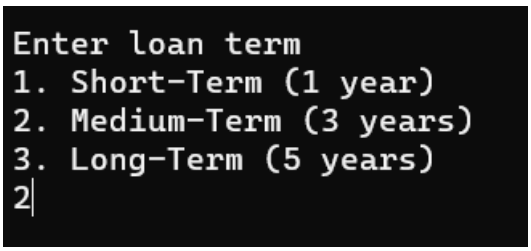

Figure 14 Loan Term

Loans Entered

When a user has entered all the relevant information, the entire console will look as follows:

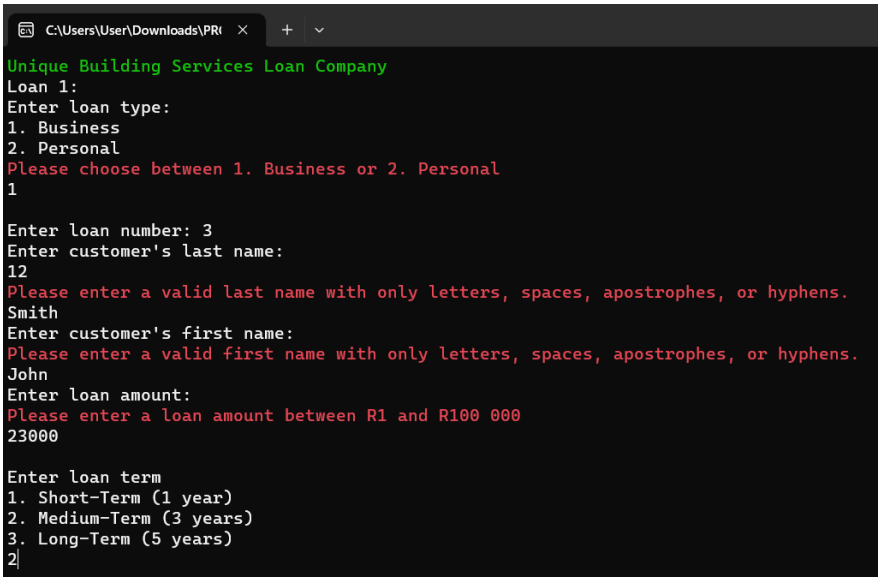

Figure 15 Loan 1

This process needs to be repeated until the information for 5 loans has been entered.

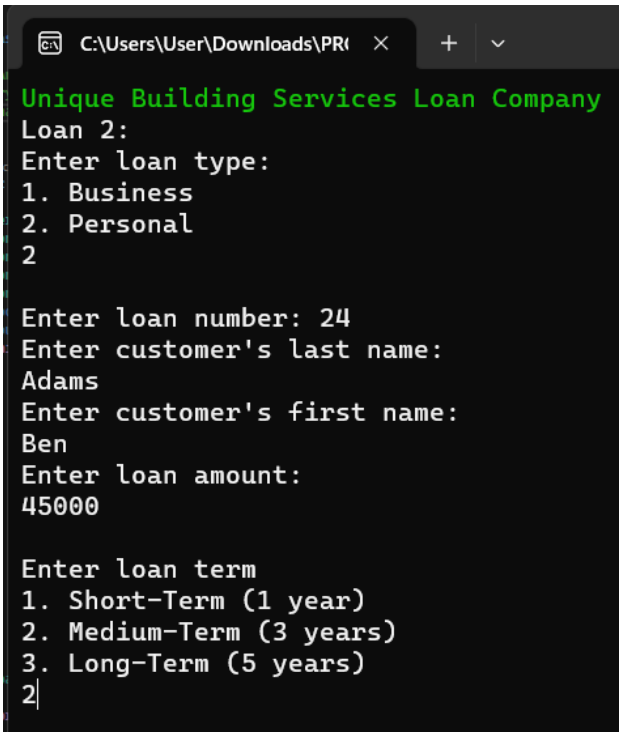

Figure 16 Loan 2

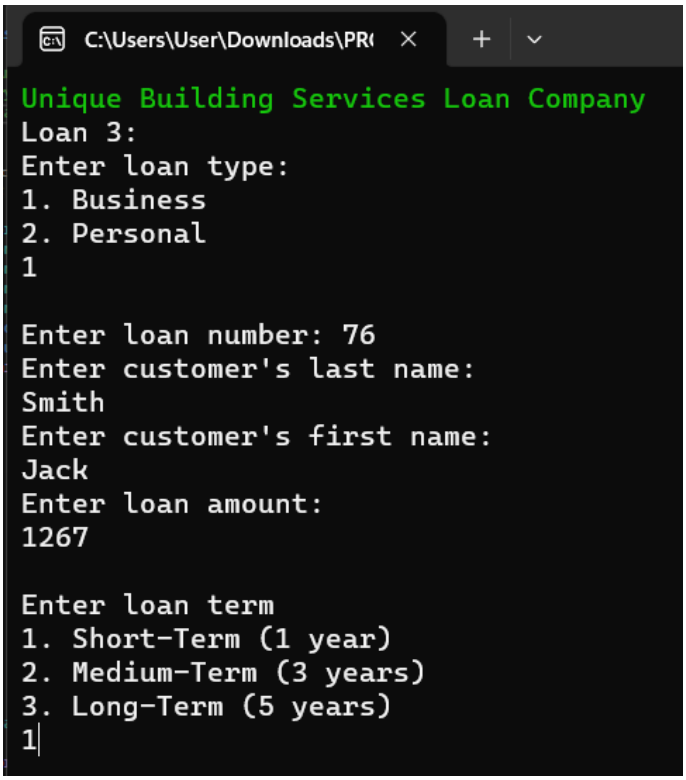

Figure 17 Loan 3

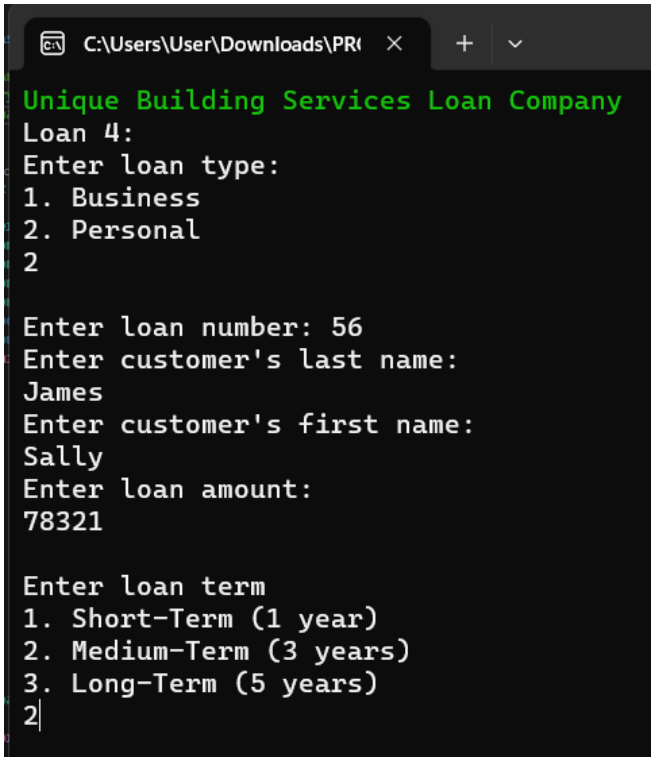

Figure 18 Loan 4

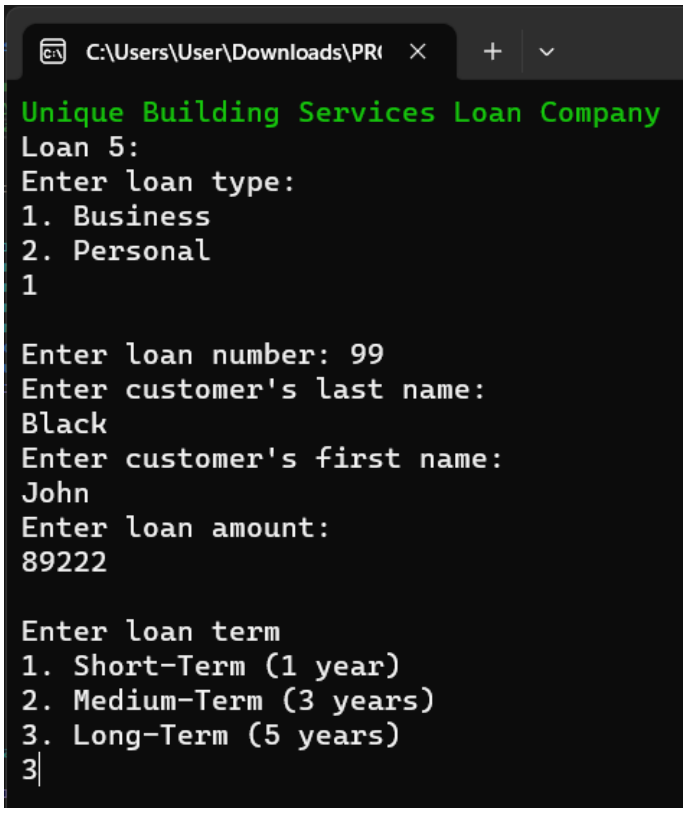

Figure 19 Loan 5

Display loans

Once the information for the five loans have been entered, the information for each loan is displayed. This includes all the data the user entered as well as the total amount that the user will owe based on the interest rate entered, term selected and type of loan that was chosen.

Furthermore, the due date at which the user must pay the loan back will be displayed.

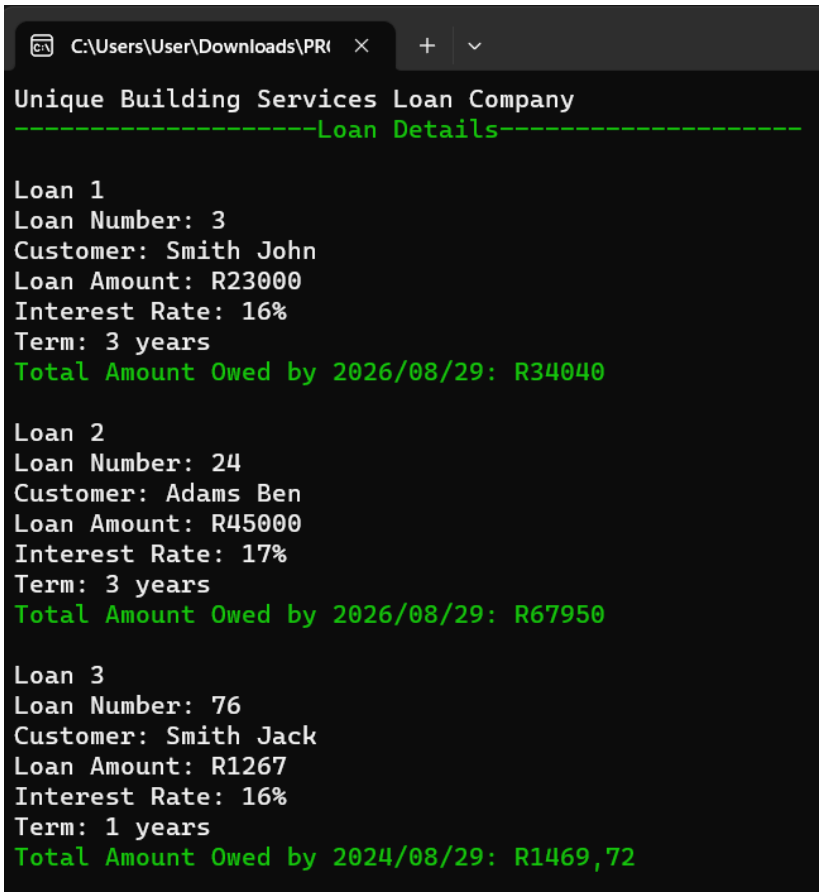

Figure 20 Loan Details Displayed

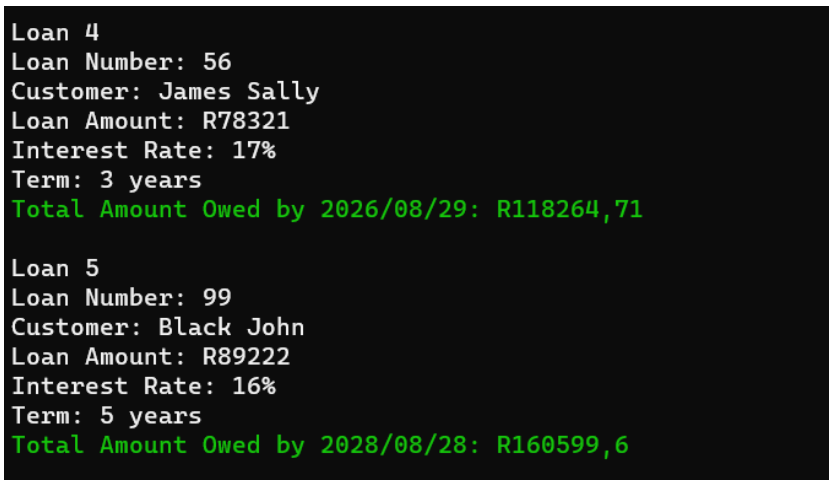

Figure 21 Loan Details Displayed Cont.