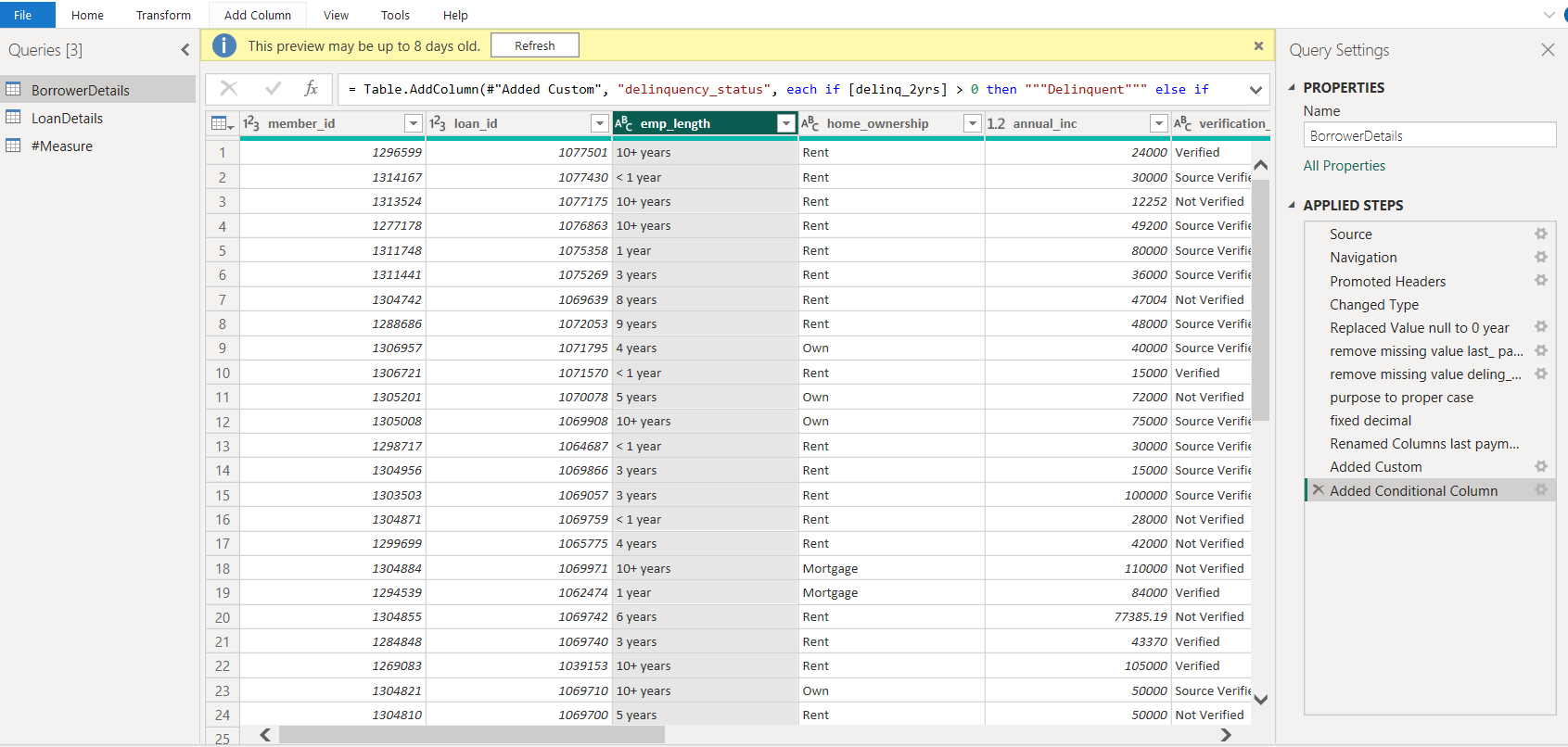
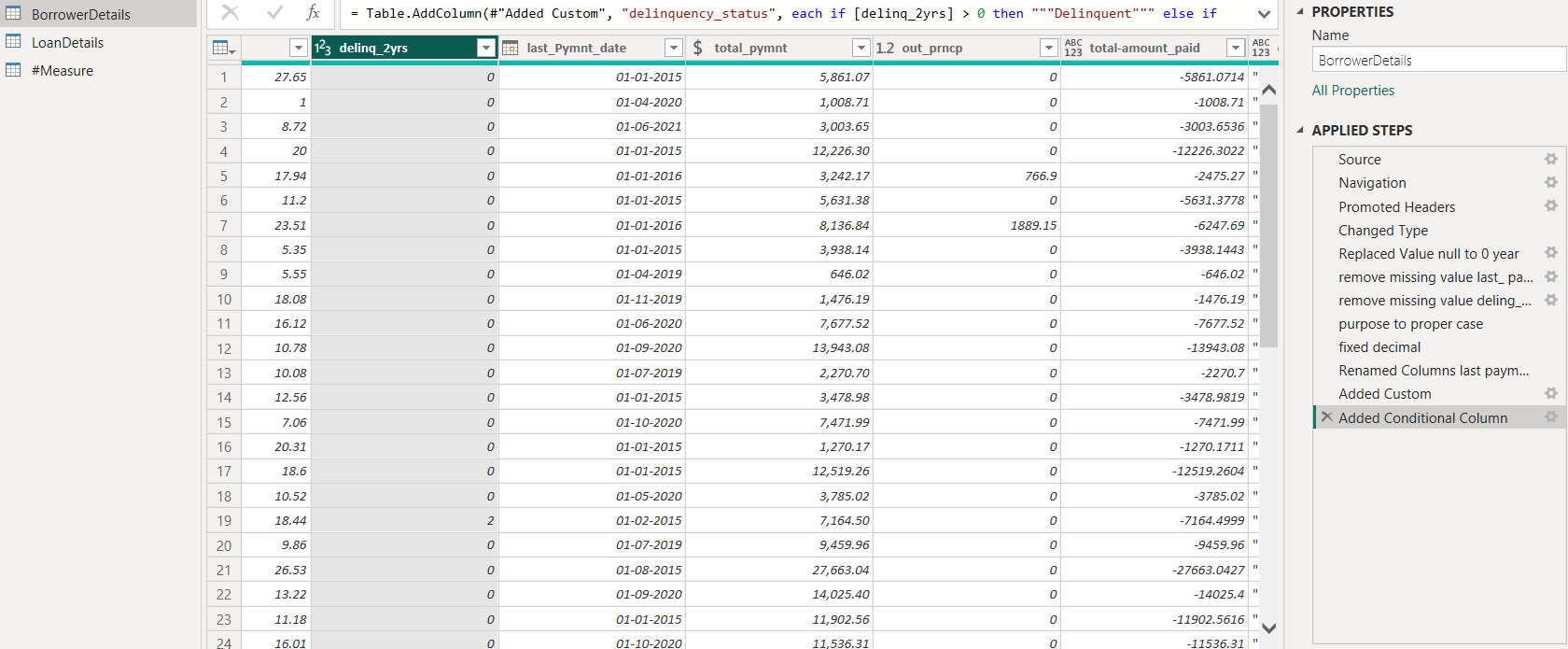
**Project Title: Bank Loan Performance Analysis**

**Data Cleaning:**

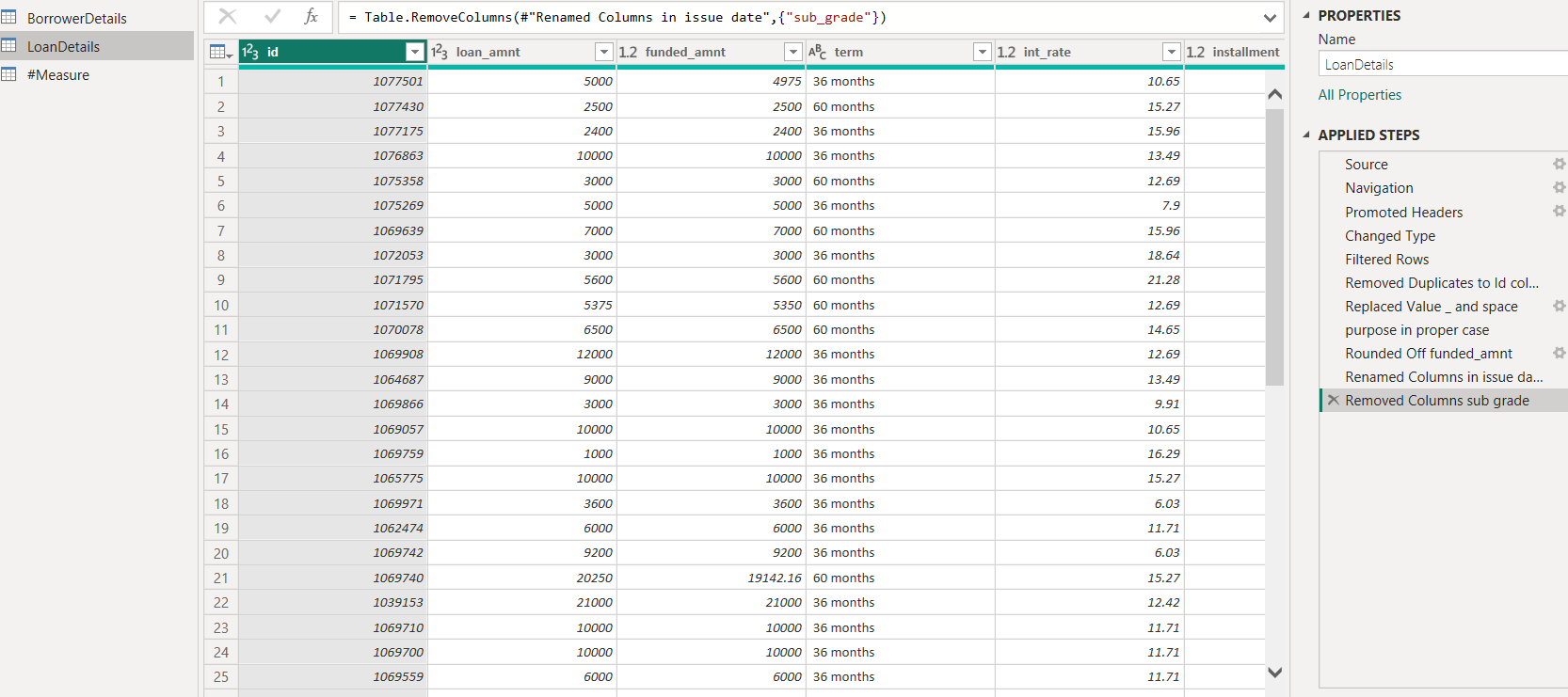
**Replace missing values (null) in the 'emp\_length' column of the "BorrowerDetails" table with '0 year'.**

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**Remove rows with missing values in the 'last\_pymnt\_d' and 'delinq\_2yrs' columns.**

****

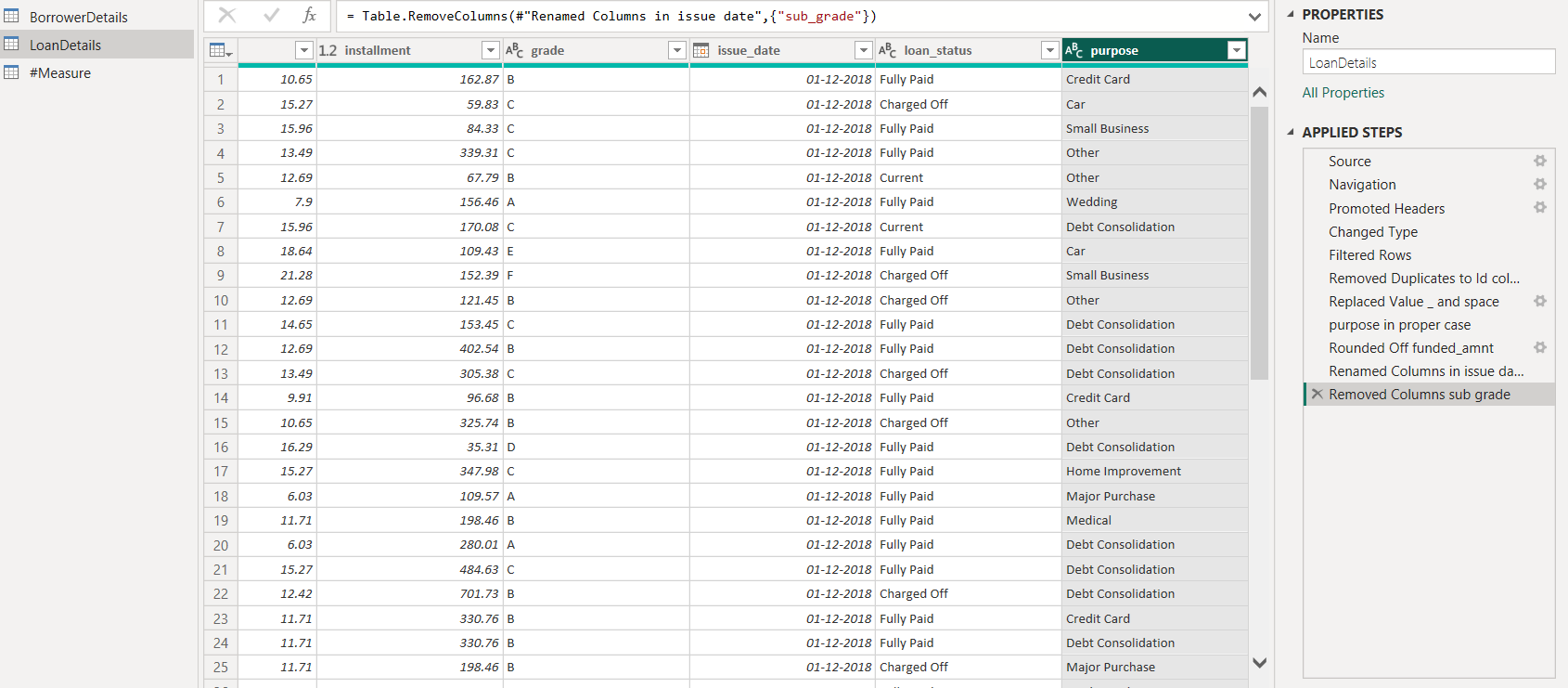
**Remove duplicate rows in the 'id' column of the "LoanDetails" table.**

****

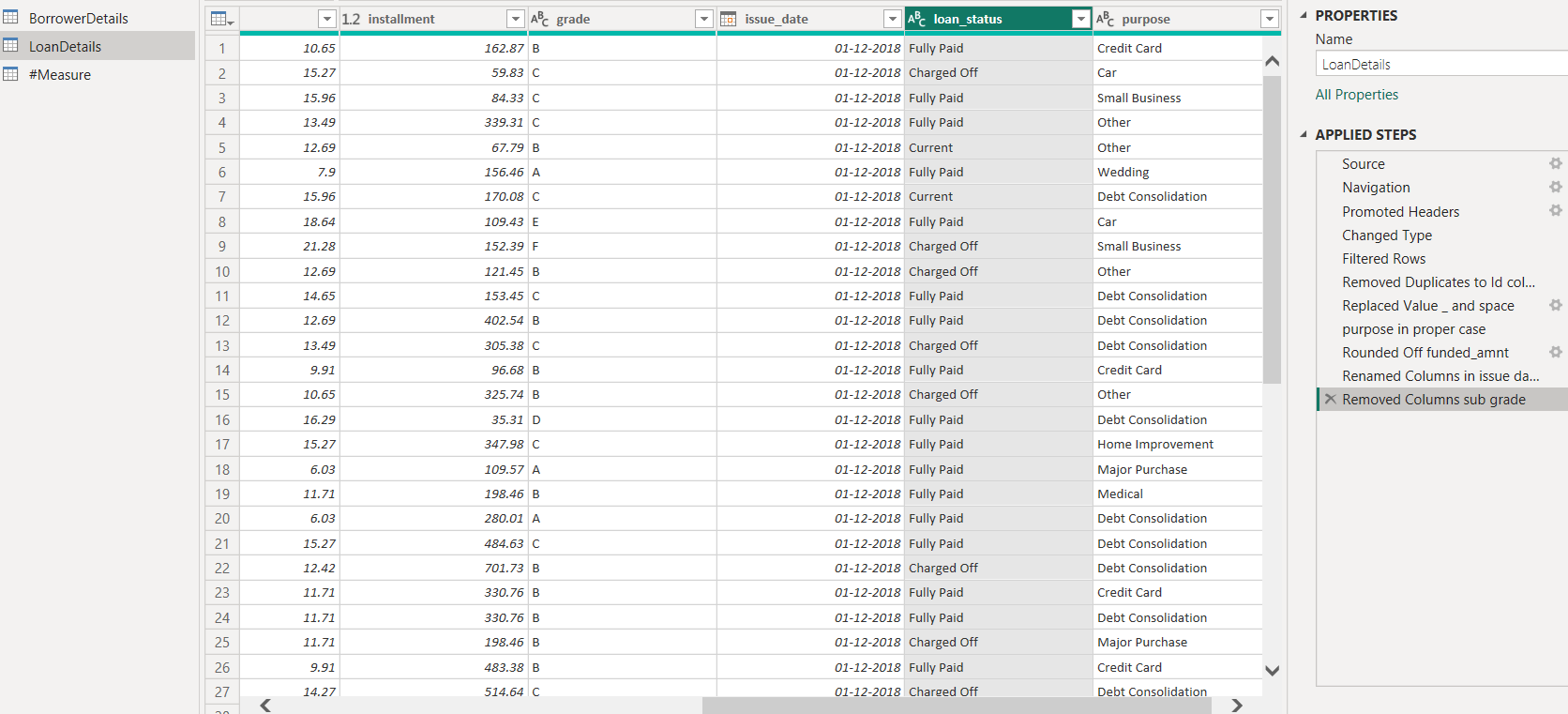
**Dealing with Inconsistencies:**

**Ensure words in the 'purpose' column are separated by spaces instead of**

**underscores (e.g., "credit card" instead of "credit\_card").**

****

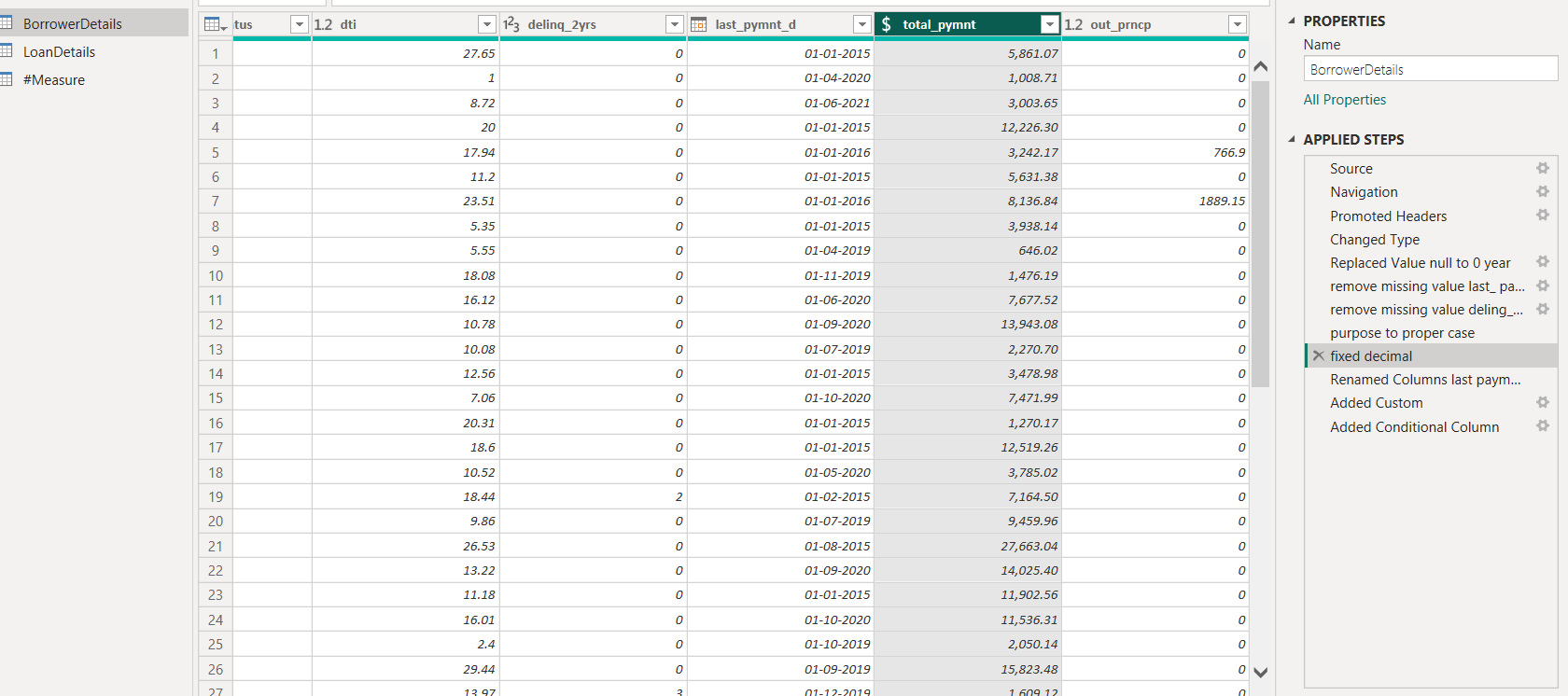
**Format the 'purpose' and 'home\_ownership' columns to proper case.**

****

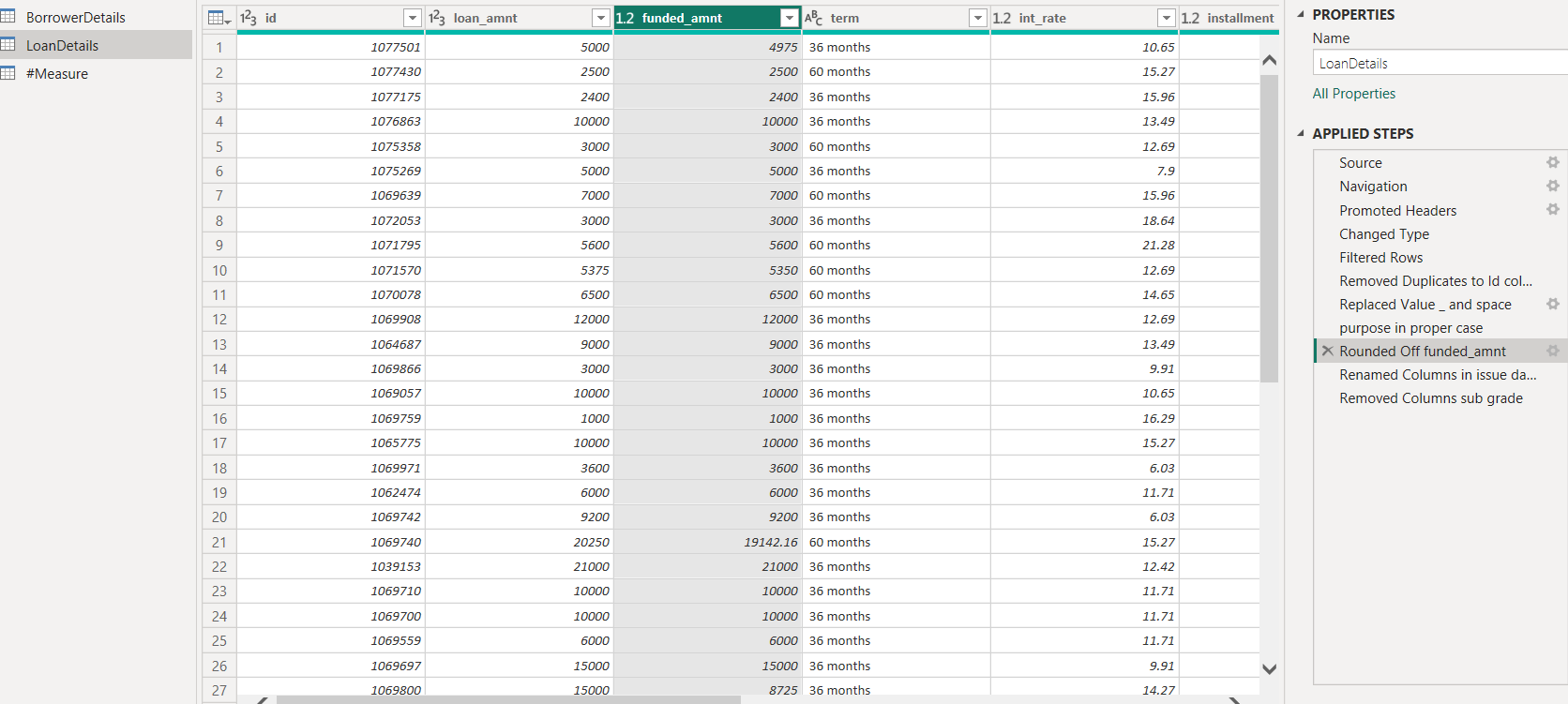
**Data Transformation:**

**Column Transformation:**

**➢ Change the data type of the 'total\_pymnt' column to 'Fixed decimal number'.**

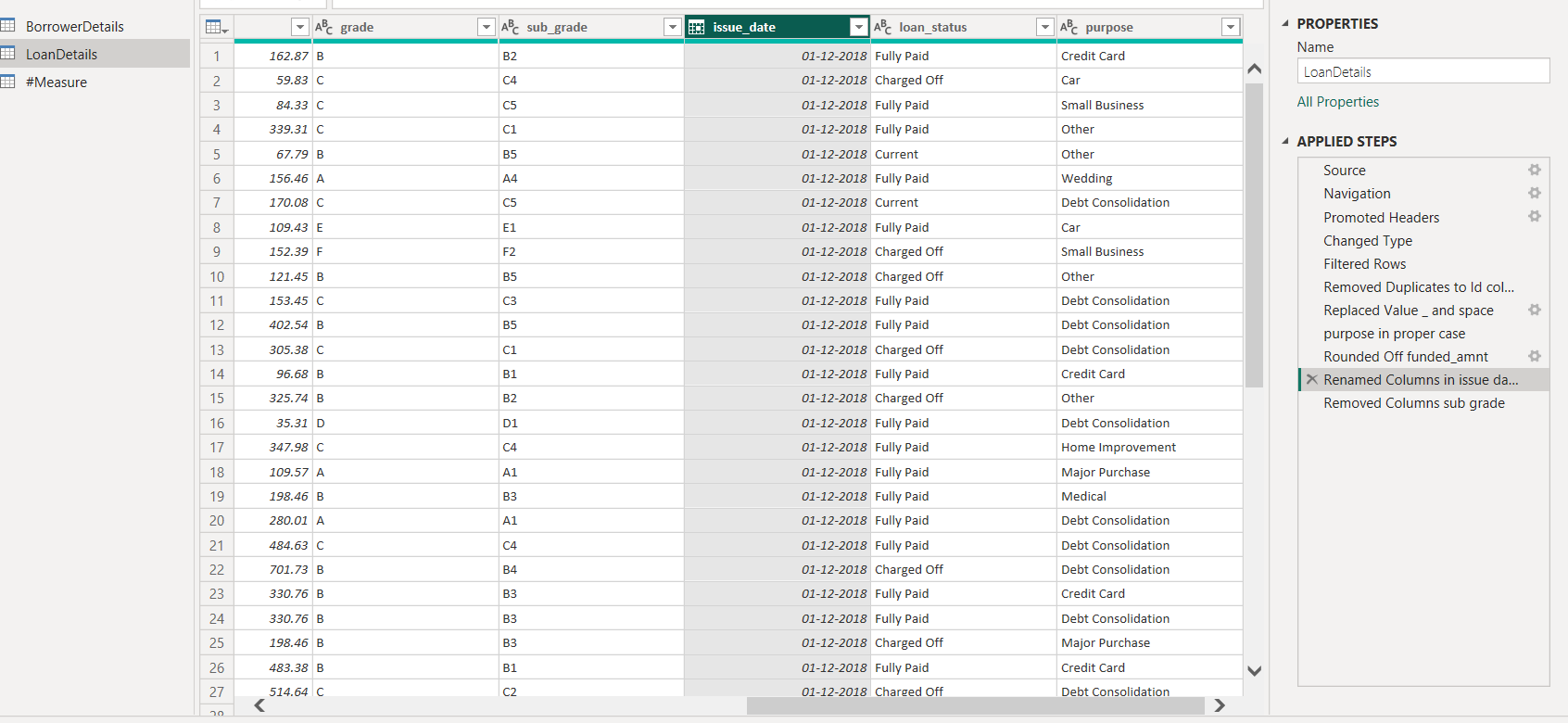
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**Round off the numbers in the 'funded\_amnt' column to 2 decimal places.**

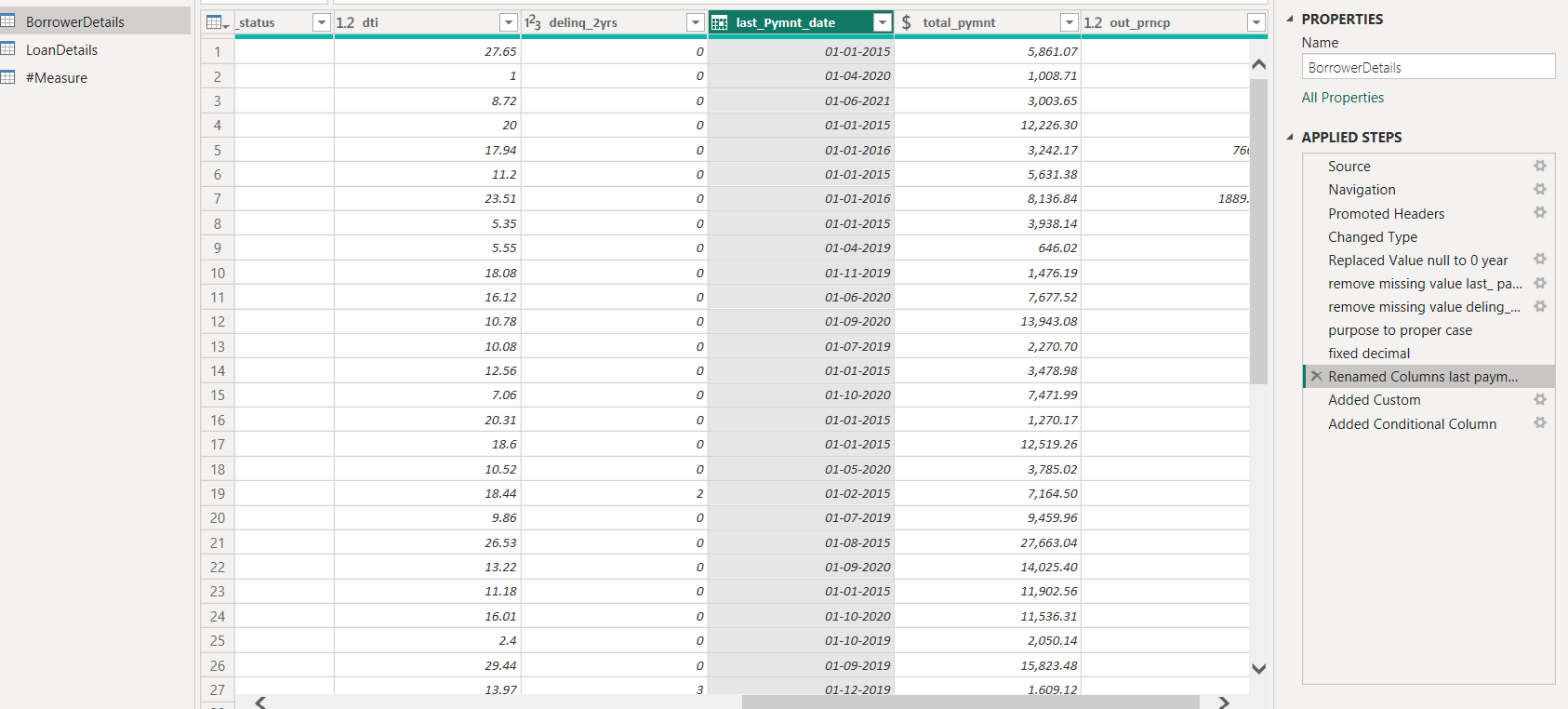
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**Column Renaming:**

**Rename the column 'issue\_d' to 'issue\_date'.**

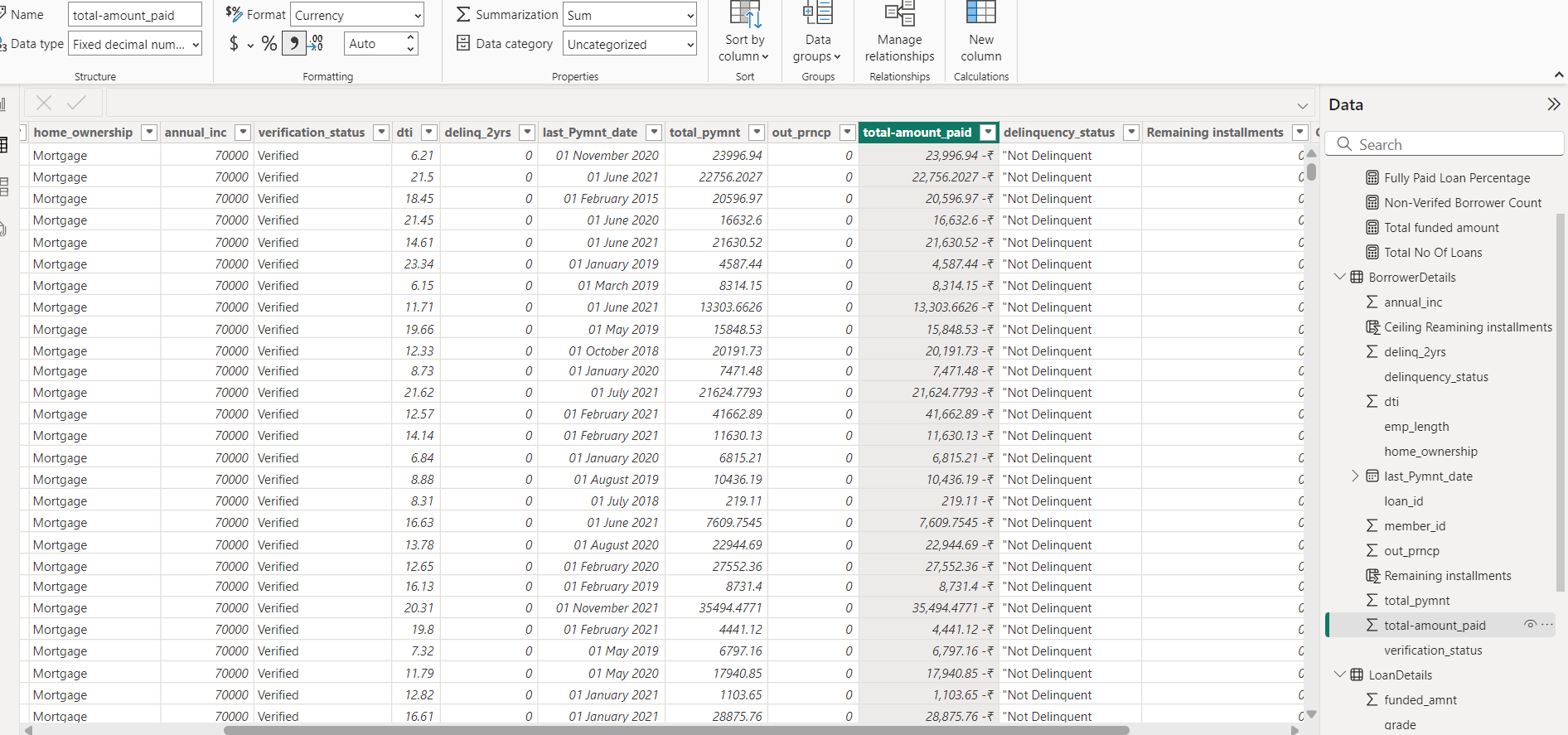
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**Rename the column 'last\_pymnt\_d' to 'last\_pymnt\_date'.**

****

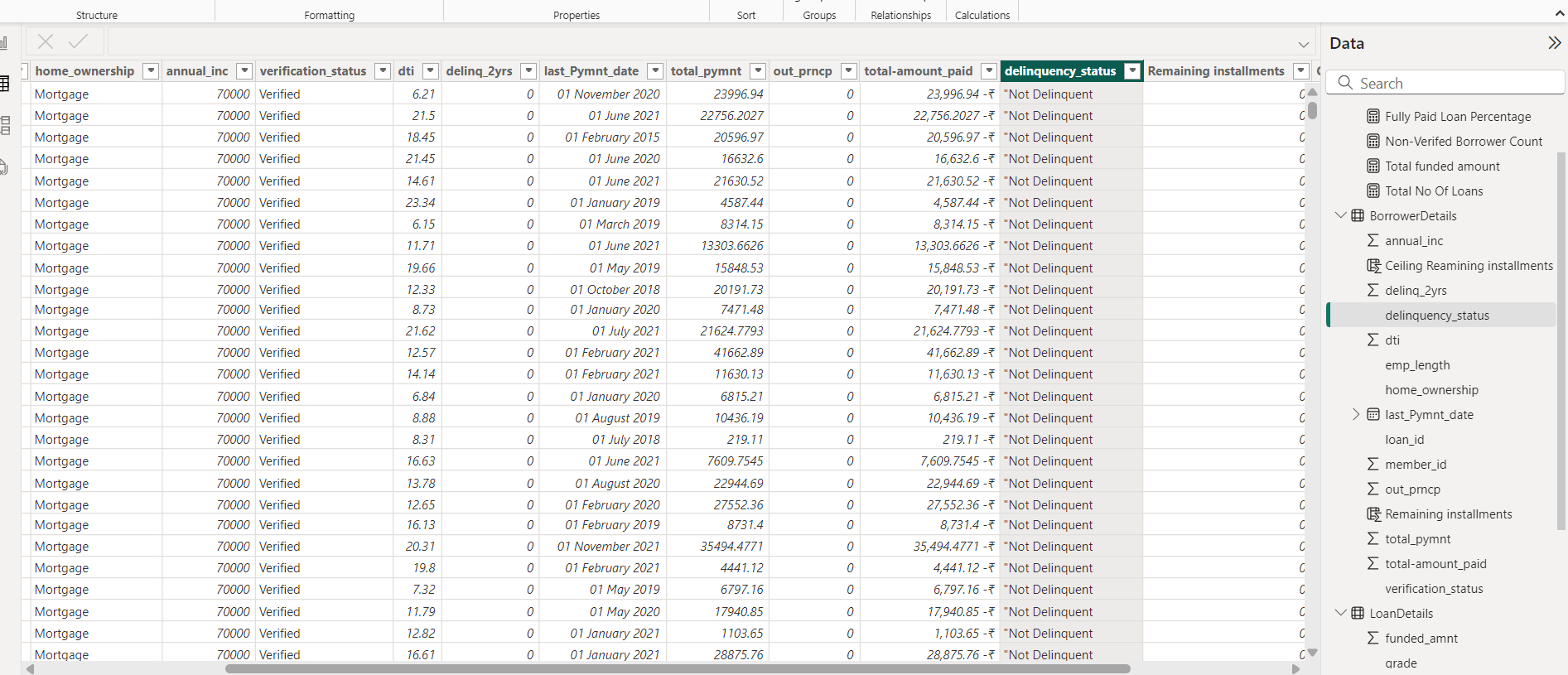
**Creating New Columns:**

**Create a new custom column named 'total\_amount\_paid' to calculate the total amount paid by each borrower by subtracting 'out\_prncp' from 'total\_pymnt'.**

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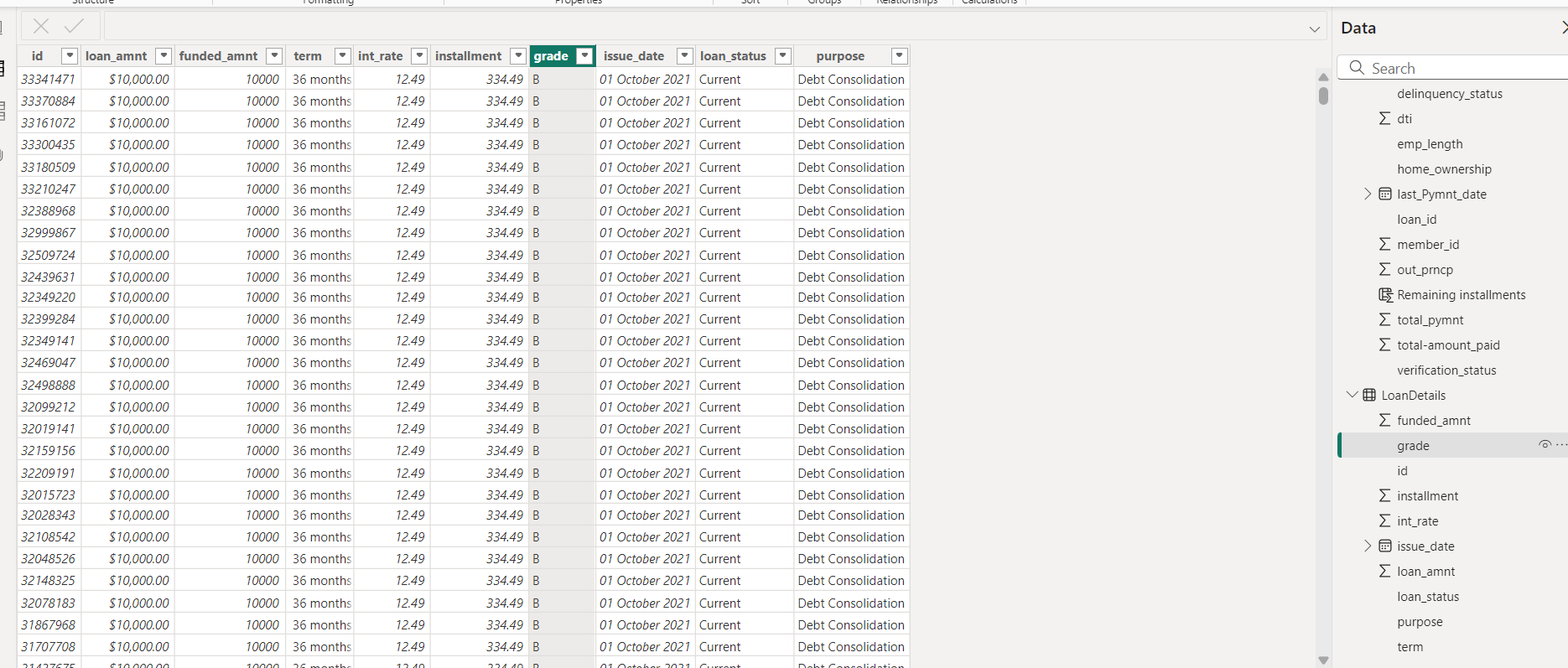
**Add a new conditional column named 'delinquency\_status' to identify if the**

**borrower has any delinquencies. If the number of delinquencies in 'delinq\_2yrs' is greater than 0, the status should be "Delinquent", otherwise "Not Delinquent".**

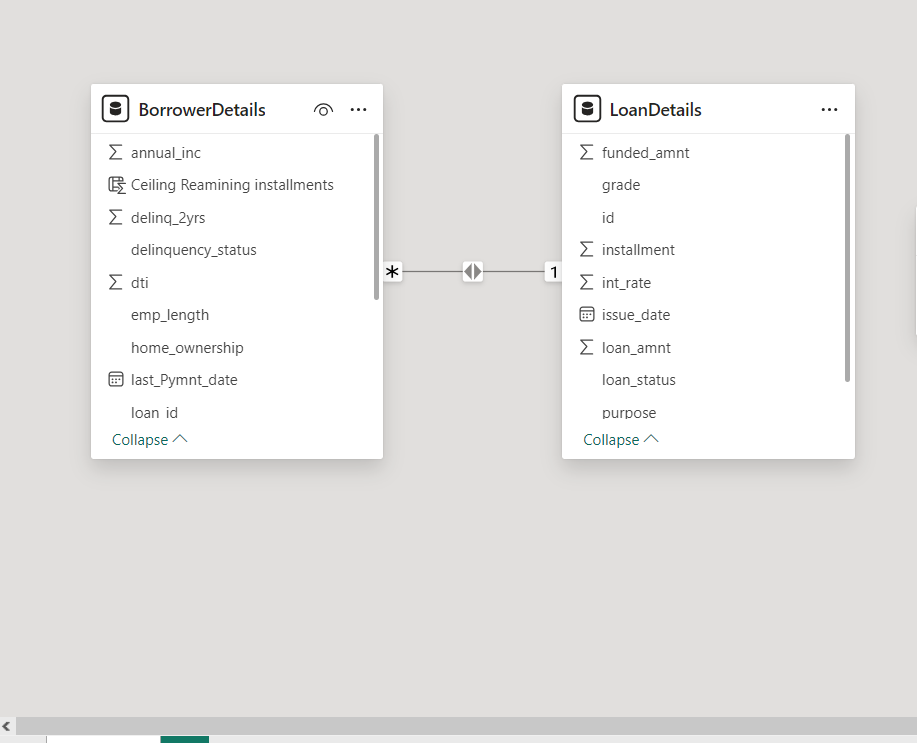
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**Column Dropping:**

**Remove the 'sub\_grade' column as that does not significantly contribute to the analysis.**

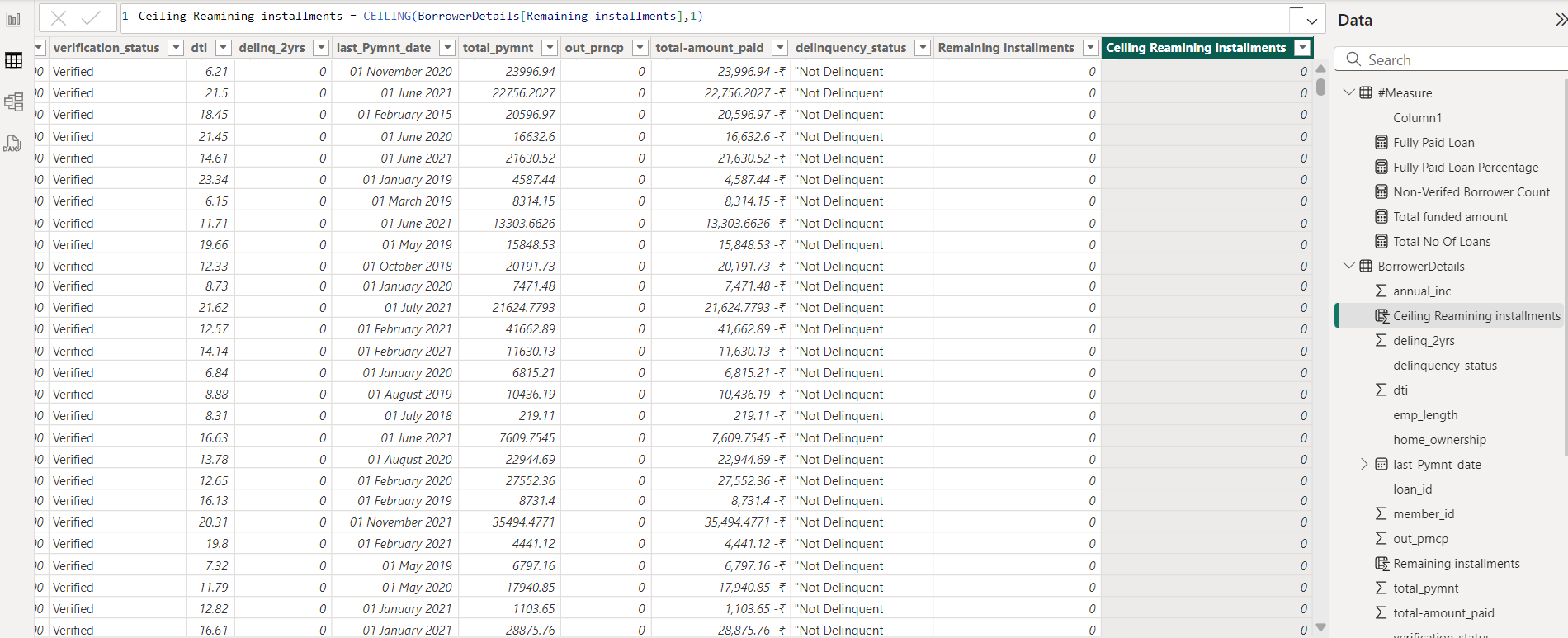
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**Data Modeling:**

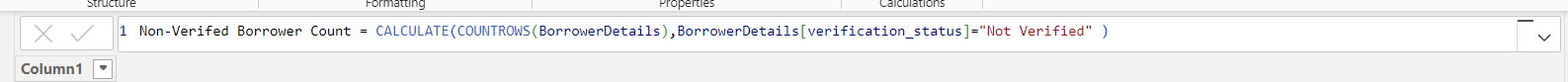
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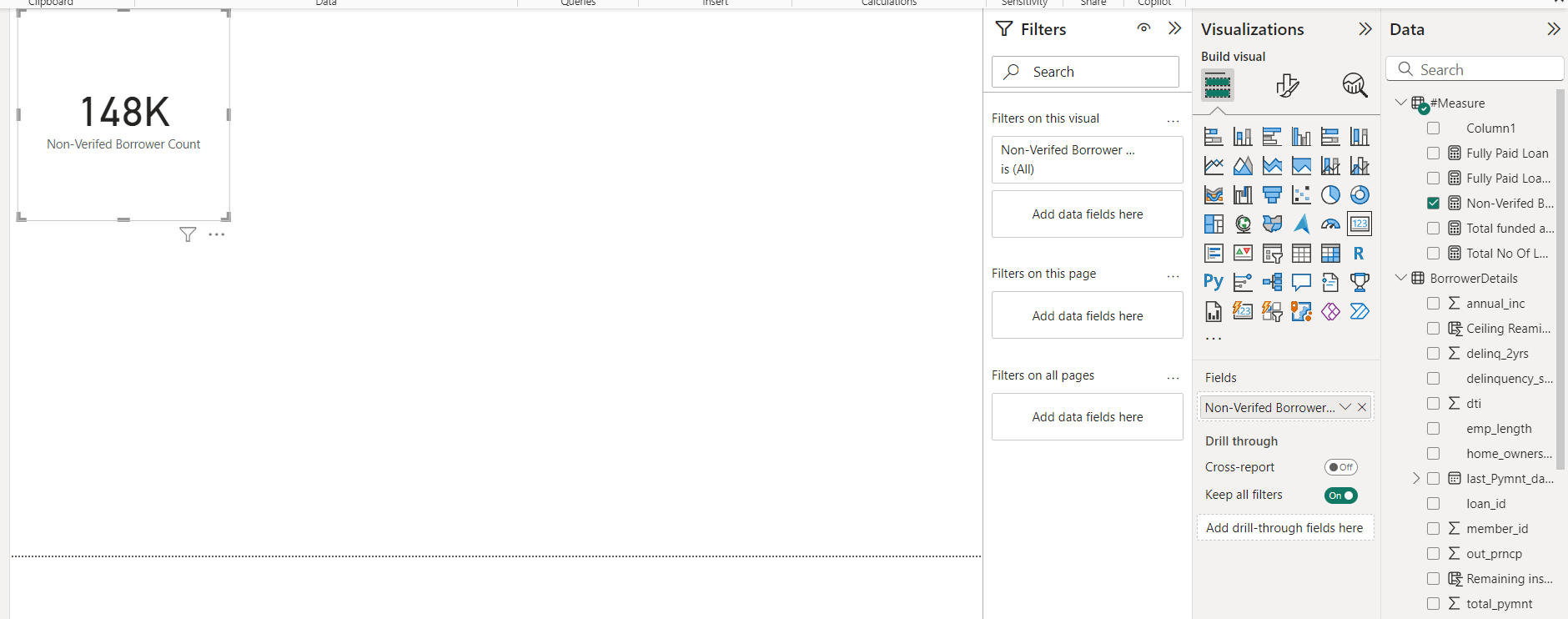
**Creating Measures and Calculated Columns using DAX**

**Create a new calculated column named 'remaining\_installments' using DAX in the"BorrowerDetails" table to calculate the number of remaining installments by dividing the remaining principal amount ('out\_prncp') by the monthly installment amount ('installment') and round up the result using the CEILING() function to account for any partial payments.**

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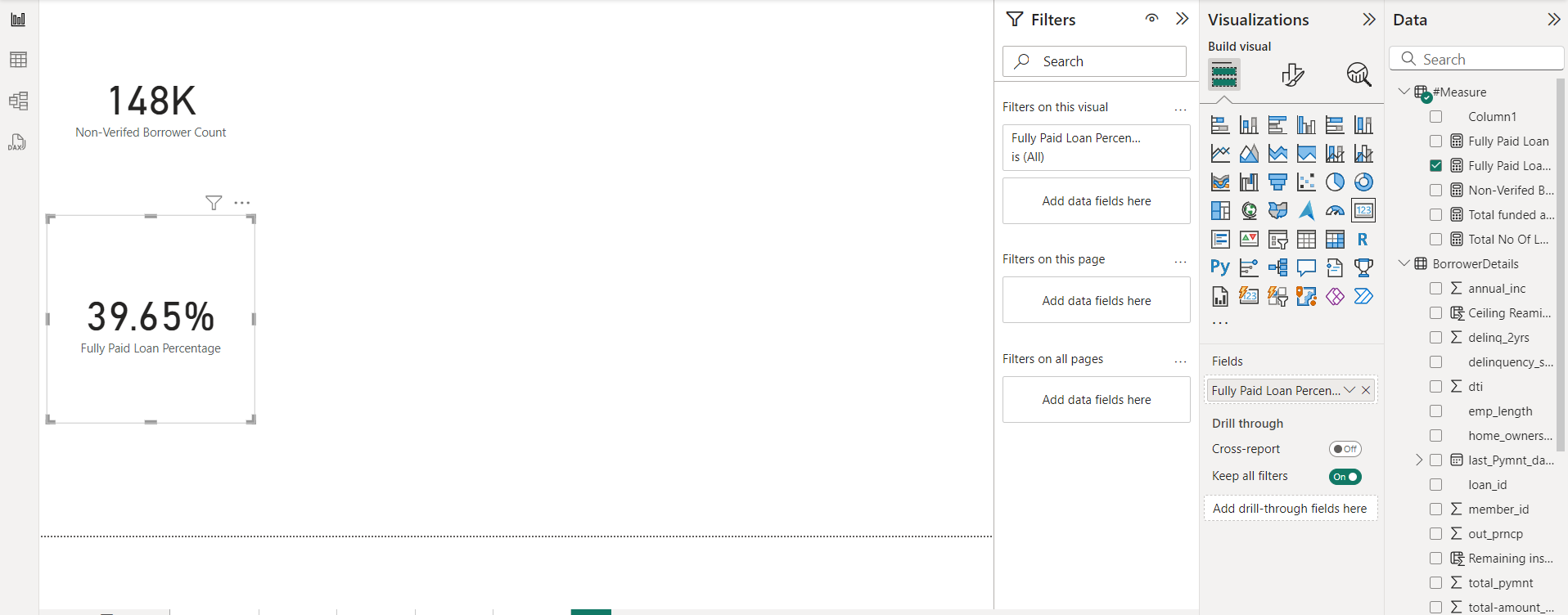
**Create a measure named 'Non-Verified Borrowers Count' using DAX to count the number of loans that have been 'Not Verified'.**

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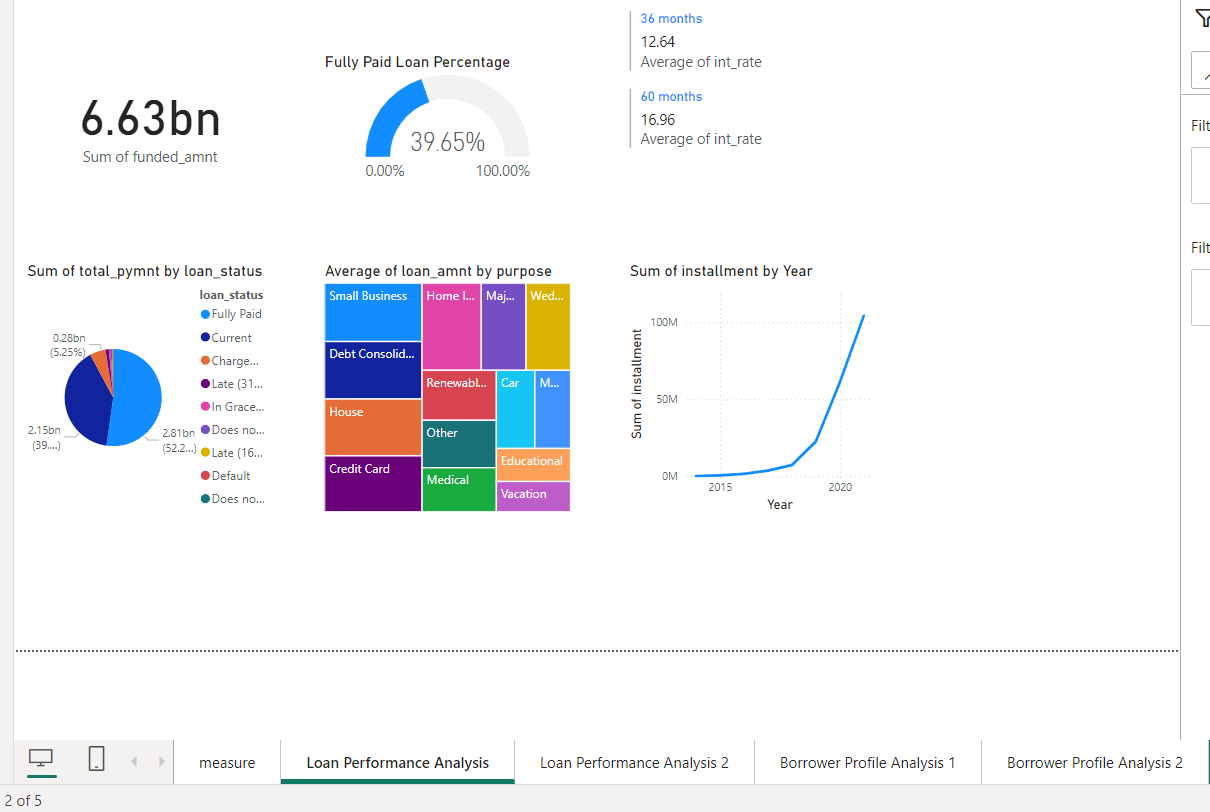
**Create a measure named 'Fully Paid Loan Percentage' to calculate the percentage of fully paid loans. Divide the number of loans with a "Fully Paid" loan status by the total number of loans and then format this measure as Percentage.**

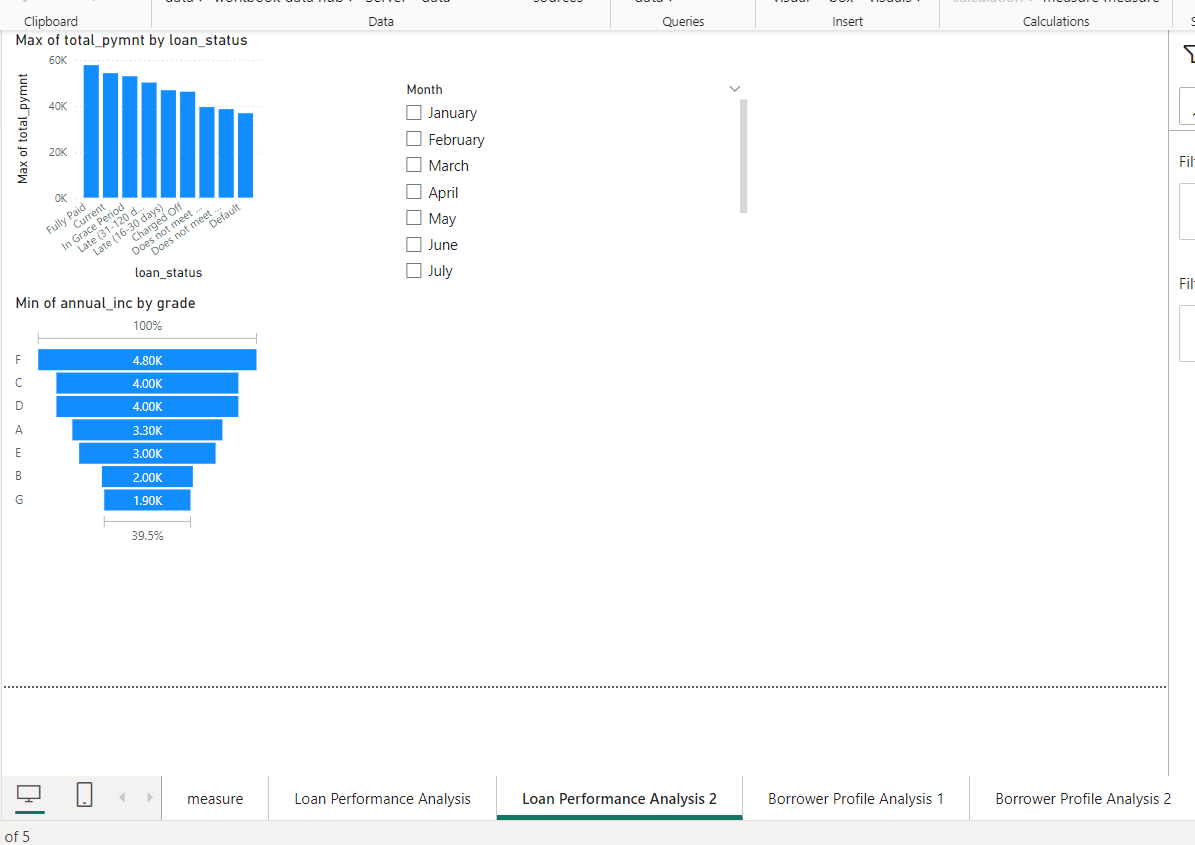
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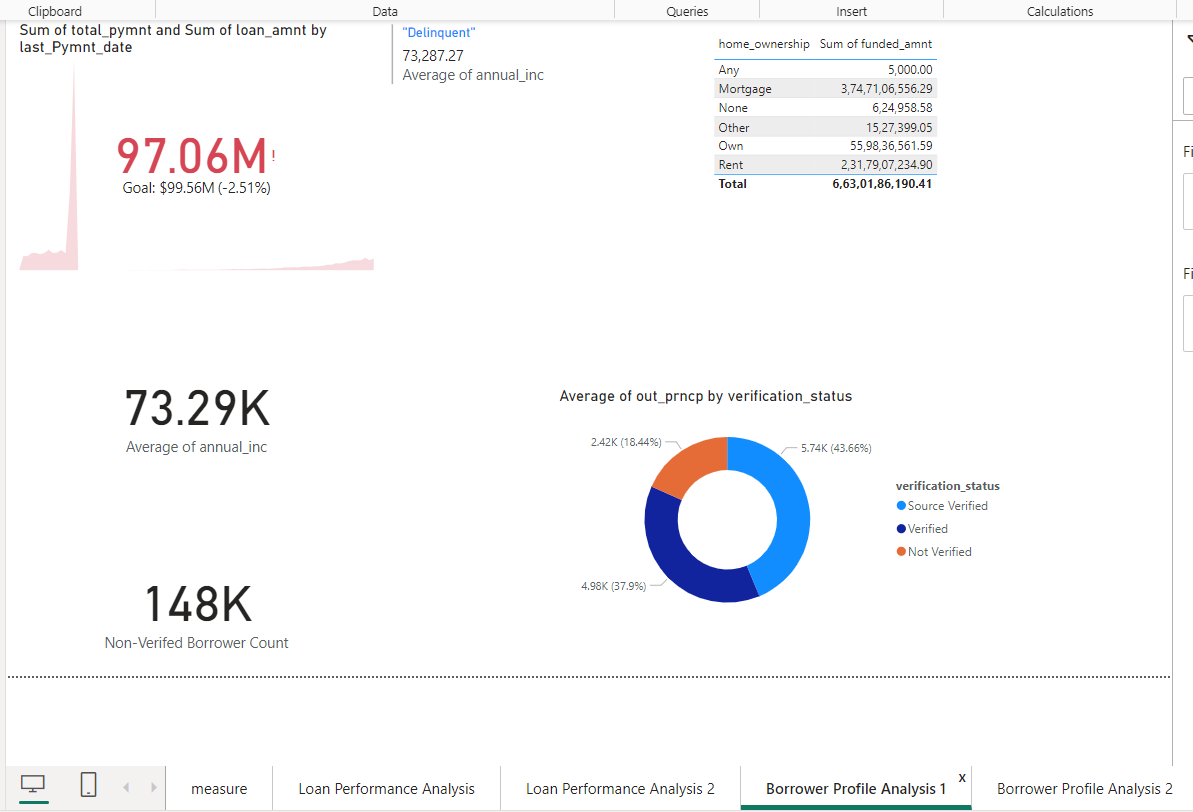
**5) Creating Comprehensive Reports**

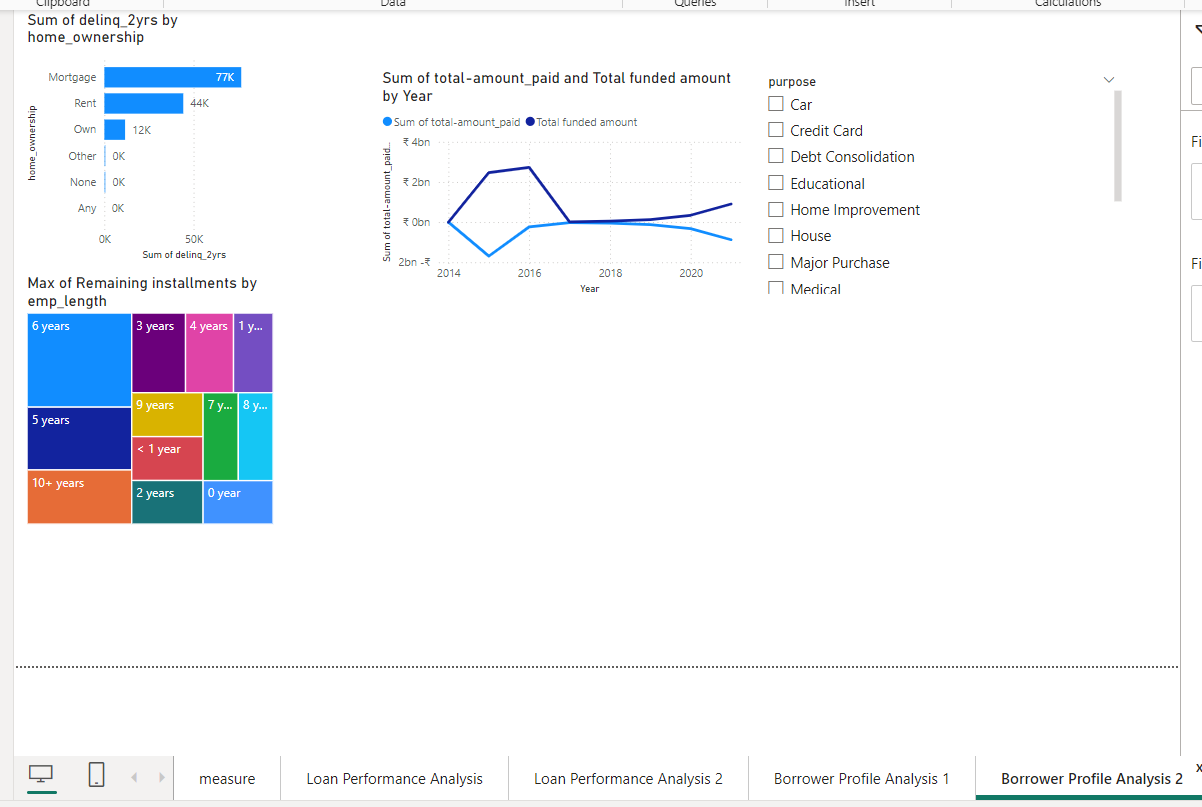
**Report 1: Loan Performance Analysis:**

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**Report 2: Borrower Profile Analysis**

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