

# Documentation of bank\_loan\_data Table

From these queries, we can infer the **structure, meaning, and purpose** of each field in the dataset.

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## 1. Table Name

### **bank\_loan\_data**

This is the main table storing loan application data.

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## 2. Columns in the Dataframe (Extracted from SQL Queries)

Below is a complete list of fields that appear in your queries, with explanations.

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### 1. id

- Unique identifier for each loan application.
  - Used in COUNT operations to measure the number of applications.
  - *Inferred from:* COUNT(id)
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### 2. issue\_date

- The date the loan was issued.
- Used for:
  - Monthly filtering
  - Yearly filtering
  - Grouping by month

- *Inferred from:* MONTH(issue\_date) & YEAR(issue\_date)
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### **3. loan\_amount**

- The total amount of the loan approved/funded.
  - Used to calculate:
    - Total funded amount
    - MTD (Month-to-Date) funded amount
    - PMTD (Previous Month-to-Date) funded amount
  - *Inferred from:* SUM(loan\_amount) queries
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### **4. total\_payment**

- The amount the borrower has paid back so far.
- Used to calculate:
  - Total amount received
  - MTD amount received
- *Inferred from:* SUM(total\_payment)

## **Bank\_db Queries**

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### **5.int\_rate**

- The interest rate of the loan (stored as a decimal, multiplied by 100 in queries).
  - *Inferred from:* AVG(int\_rate \* 100)
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### **6.DTI (Debt-to-Income Ratio)**

- Ratio of borrower debt to income.
  - Appears to be a decimal (e.g., 0.18 = 18%).
  - *Inferred from:*  $\text{AVG}(\text{dti} * 100)$
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## 7. loan\_status

- Shows whether the loan is:
    - Fully Paid
    - Current
    - Charged Off
    - etc.
  - Used to determine:
    - Good loans
    - Bad loans
    - Loan status summary
  - *Inferred from:* `loan_status IN ('Fully Paid', 'Current', 'Charged Off')`
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## 8. term

- Length of the loan (e.g., 36 months, 60 months).
- *Inferred from:* Grouping by term.

## Bank\_db Queries

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## 9. emp\_length

- Borrower's employment duration.
- *Inferred from:* Queries grouped by emp\_length.

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## 10. Home ownership

- Borrower's home ownership status:
  - Own
  - Rent
  - Mortgage
- *Inferred from:* Grouping by home\_ownership.

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## 11. grade

- Loan grade category (A, B, C, etc.).
- *Inferred from:* WHERE grade = 'A'

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## 12. purpose

- Reason for taking the loan (e.g., debt consolidation, education, home improvement).
- *Inferred from:* Grouping by purpose.