**SQL Server Management Studio**

- Imported data to SQL Management Server
- Made id as primary key
- Changed nvarchar to varchar
- Changed emp title to Varchar(100)
- Loan amount to int from small int
- Data successfully imported
- Create database

_____

SELECT COUNT (id) as Total_Applications from financial_loan

```
SELECT COUNT (id) as Total_Applications from financial_loan
```

| Total_Applications |
|---|
| 38576 |

SELECT COUNT (id) as MTD_Loan_Applications from financial_loan
WHERE MONTH(issue_date)=12

```
SELECT COUNT (id) as MTD_Loan_Applications from financial_loan
WHERE MONTH(issue_date)=12
```

| MTD_Loan_Applications |
|---|
| 4314 |

SELECT COUNT(id) AS PMTD_Loan_Applications FROM financial_loan
WHERE MONTH(issue_date) = 11

```
SELECT COUNT(id) AS PMTD_Loan_Applications FROM financial_loan
WHERE MONTH(issue_date) = 11
```

| | PMTD_Loan_Applications |
|---|---|
| 1 | 4035 |

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM financial_loan

| Total_Funded_Amount |
|---|
| 435757075 |

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM financial_loan
WHERE MONTH(issue_date) = 12

| Total_Funded_Amount |
| --- |
| 53981425 |

SELECT SUM(loan_amount) AS PMTD_Total_Funded_Amount FROM
financial_loan
WHERE MONTH(issue_date) = 11

| PMTD_Total_Funded_Amount |
| --- |
| 47754825 |

SELECT AVG(int_rate)*100 AS Avg_Int_Rate FROM financial_loan

| Avg_Int_Rate |
| --- |
| 12.0488314172048 |

SELECT AVG(int_rate)*100 AS MTD_Avg_Int_Rate FROM financial_loan
WHERE MONTH(issue_date) = 12

| MTD_Avg_Int_Rate |
| --- |
| 12.3560408676042 |

SELECT AVG(int_rate)*100 AS PMTD_Avg_Int_Rate FROM financial_loan
WHERE MONTH(issue_date) = 11

| PMTD_Avg_Int_Rate |
| --- |
| 11.9417175498261 |

SELECT AVG(dti)*100 AS Avg_DTI FROM financial_loan

| Avg_DTI |
| --- |
| 13.3274331211432 |

SELECT AVG(dti)*100 AS Avg_DTI FROM financial_loan
WHERE MONTH(issue_date) = 12

| Avg_DTI |
| --- |
| 13.6655377880425 |

SELECT AVG(dti)*100 AS Avg_DTI FROM financial_loan
WHERE MONTH(issue_date) = 11

| Avg_DTI |
| --- |
| 13.3027335836364 |

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```
SELECT
    (COUNT(CASE WHEN loan_status = 'Fully Paid' OR loan_status = 'Current' THEN
id END) * 100.0) /
        COUNT(id) AS Good_Loan_Percentage
FROM financial_loan
```

| Good_Loan_Percentage |
| --- |
| 86.175342181667 |

```
SELECT COUNT(id) AS Good_Loan_Applications FROM financial_loan
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'
```

| Good_Loan_Applications |
| --- |
| 33243 |

```
SELECT SUM(loan_amount) AS Good_Loan_Funded_amount FROM financial_loan
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'
```

| Good_Loan_Funded_amount |
| --- |
| 370224850 |

```
SELECT SUM(total_payment) AS Good_Loan_amount_received FROM
financial_loan
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'
```

| Good_Loan_amount_received |
| --- |
| 435786170 |

```
SELECT
    (COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END) * 100.0) /
        COUNT(id) AS Bad_Loan_Percentage
FROM financial_loan
```

| Bad_Loan_Percentage |
| --- |
| 13.824657818332 |

```
SELECT COUNT(id) AS Bad_Loan_Applications FROM financial_loan
WHERE loan_status = 'Charged Off'
```

| Bad_Loan_Applications |
|---|
| 5333 |

SELECT SUM(loan_amount) AS Bad_Loan_Funded_amount FROM financial_loan
WHERE loan_status = 'Charged Off'

| Bad_Loan_Funded_amount |
|---|
| 65532225 |

SELECT SUM(total_payment) AS Bad_Loan_amount_received FROM financial_loan
WHERE loan_status = 'Charged Off'

| Bad_Loan_amount_received |
|---|
| 37284763 |

_____

```
SELECT
    loan_status,
    COUNT(id) AS LoanCount,
    SUM(total_payment) AS Total_Amount_Received,
    SUM(loan_amount) AS Total_Funded_Amount,
    AVG(int_rate * 100) AS Interest_Rate,
    AVG(dti * 100) AS DTI
FROM
    financial_loan
GROUP BY
    loan_status
```

|   | loan_status | LoanCount | Total_Amount_Received | Total_Funded_Amount | Interest_Rate | DTI |
|---|---|---|---|---|---|---|
| 1 | Fully Paid | 32145 | 411586256 | 351358350 | 11.6410707918092 | 13.1673507557434 |
| 2 | Current | 1098 | 24199914 | 18866500 | 15.0993260800947 | 14.7243442736843 |
| 3 | Charged Off | 5333 | 37284763 | 65532225 | 13.8785749318289 | 14.0047328005517 |

```
SELECT
    loan_status,
    SUM(total_payment) AS MTD_Total_Amount_Received,
    SUM(loan_amount) AS MTD_Total_Funded_Amount
FROM financial_loan
WHERE MONTH(issue_date) = 12
GROUP BY loan_status
```

| | loan_status | MTD_Total_Amount_Received | MTD_Total_Funded_Amount |
|---|---|---|---|
| 1 | Fully Paid | 47815851 | 41302025 |
| 2 | Current | 4934318 | 3946625 |
| 3 | Charged Off | 5324211 | 8732775 |

---

```
SELECT
        address_state AS State,
        COUNT(id) AS Total_Loan_Applications,
        SUM(loan_amount) AS Total_Funded_Amount,
        SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
GROUP BY address_state
ORDER BY address_state
```

| | State | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|---|
| 1 | AK | 78 | 1031800 | 1108570 |
| 2 | AL | 432 | 4949225 | 5492272 |
| 3 | AR | 236 | 2529700 | 2777875 |
| 4 | AZ | 833 | 9206000 | 10041986 |
| 5 | CA | 6894 | 78484125 | 83901234 |
| 6 | CO | 770 | 8976000 | 9845810 |
| 7 | CT | 730 | 8435575 | 9357612 |
| 8 | DC | 214 | 2652350 | 2921854 |
| 9 | DE | 110 | 1138100 | 1269136 |
| 10 | FL | 2773 | 30046125 | 31601905 |
| 11 | GA | 1355 | 15480325 | 16728040 |

```
SELECT
        term AS Term,
        COUNT(id) AS Total_Loan_Applications,
        SUM(loan_amount) AS Total_Funded_Amount,
        SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
GROUP BY term
ORDER BY term
```

| Term | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|
| 36 months | 28237 | 273041225 | 294709458 |
| 60 months | 10339 | 162715850 | 178361475 |

```
SELECT
        emp_length AS Employee_Length,
        COUNT(id) AS Total_Loan_Applications,
```

```
        SUM(loan_amount) AS Total_Funded_Amount,
        SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
GROUP BY emp_length
ORDER BY emp_length
```

| Employee_Length | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|
| < 1 year | 4575 | 44210625 | 47545011 |
| 1 year | 3229 | 32883125 | 35498348 |
| 10+ years | 8870 | 116115950 | 125871616 |
| 2 years | 4382 | 44967975 | 49206961 |
| 3 years | 4088 | 43937850 | 47551832 |
| 4 years | 3428 | 37600375 | 40964850 |
| 5 years | 3273 | 36973625 | 40397571 |
| 6 years | 2228 | 25612650 | 27908658 |
| 7 years | 1772 | 20811725 | 22584136 |
| 8 years | 1476 | 17558950 | 19025777 |
| 9 years | 1255 | 15084225 | 16516173 |

```
SELECT
        purpose AS PURPOSE,
        COUNT(id) AS Total_Loan_Applications,
        SUM(loan_amount) AS Total_Funded_Amount,
        SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
GROUP BY purpose
ORDER BY purpose
```

| | PURPOSE | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|---|
| 1 | car | 1497 | 10223575 | 11324914 |
| 2 | credit card | 4998 | 58885175 | 65214084 |
| 3 | Debt consolidation | 18214 | 232459675 | 253801871 |
| 4 | educational | 315 | 2161650 | 2248380 |
| 5 | home improvement | 2876 | 33350775 | 36380930 |
| 6 | house | 366 | 4824925 | 5185538 |
| 7 | major purchase | 2110 | 17251600 | 18676927 |
| 8 | medical | 667 | 5533225 | 5851372 |
| 9 | moving | 559 | 3748125 | 3999899 |
| 10 | other | 3824 | 31155750 | 33289676 |
| 11 | renewable energy | 94 | 845750 | 898931 |

```
SELECT
        home_ownership AS Home_Ownership,
        COUNT(id) AS Total_Loan_Applications,
        SUM(loan_amount) AS Total_Funded_Amount,
        SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
```

GROUP BY home_ownership
ORDER BY home_ownership

Results  📊 Messages

| Home_Ownership | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|
| MORTGAGE | 17198 | 219329150 | 238474438 |
| NONE | 3 | 16800 | 19053 |
| OTHER | 98 | 1044975 | 1025257 |
| OWN | 2838 | 29597675 | 31729129 |
| RENT | 18439 | 185768475 | 201823056 |

SELECT
      purpose AS PURPOSE,
      COUNT(id) AS Total_Loan_Applications,
      SUM(loan_amount) AS Total_Funded_Amount,
      SUM(total_payment) AS Total_Amount_Received
FROM financial_loan
WHERE grade = 'A'
GROUP BY purpose
ORDER BY purpose

| | PURPOSE | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|---|---|---|---|---|
| 1 | car | 577 | 3629475 | 3805538 |
| 2 | credit card | 1353 | 12636075 | 13339495 |
| 3 | Debt consolidation | 3753 | 37216300 | 38822971 |
| 4 | educational | 79 | 484000 | 515639 |
| 5 | home improvement | 933 | 8359175 | 8744006 |
| 6 | house | 91 | 916575 | 957878 |
| 7 | major purchase | 796 | 5344575 | 5604259 |
| 8 | medical | 197 | 1471850 | 1526882 |
| 9 | moving | 164 | 1069450 | 1099875 |
| 10 | other | 1024 | 7043175 | 7397982 |
| 11 | renewable_energy | 29 | 224150 | 225827 |