**SQL**

**select \* from loans**

**--total applications**

select count(id) as total\_applications

from loans

output:



--**mtd--month to date**

select count(id) as mtd\_total\_applications

from loans

where month( issue\_date) = 12

output:



**---pmtd--privious month to date**

select count(id) as pmtd\_total\_applications

from loans

where month( issue\_date) = 11

output:



**--total funded amount**

select sum(loan\_amount) as total\_funded\_amount

from loans

output:



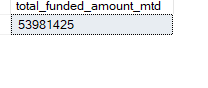
**---mtd of funded amount**

select sum(loan\_amount) as total\_funded\_amount\_mtd

from lones

where month(issue\_date) = 12

output:



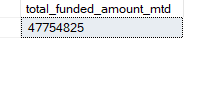
**---pmtd**

select sum(loan\_amount) as total\_funded\_amount\_mtd

from loans

where month(issue\_date) = 11

output:



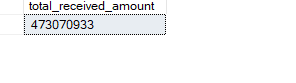
**---total receive amount**

**select \* from loans**

select sum(total\_payment) as total\_received\_amount

from loans

output:



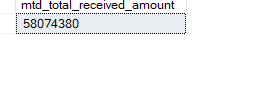
**---mtd**

select sum(total\_payment) as mtd\_total\_received\_amount

from loans

where month(issue\_date) = 12

output:



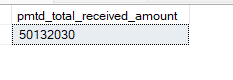
**----pmtd**

select sum(total\_payment) as pmtd\_total\_received\_amount

from loans

where month(issue\_date) = 11

output:

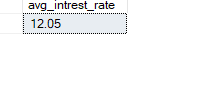


**---avg interst rate**

select round(avg(int\_rate),4)\*100 as avg\_intrest\_rate

from loans

output:



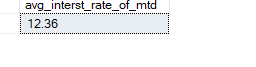
**---mtd**

select round(avg(int\_rate),4)\*100 as avg\_interst\_rate\_of\_mtd

from loans

where month(issue\_date) = 12

output:

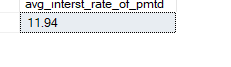


**--pmtd**

select round(avg(int\_rate),4)\*100 as avg\_interst\_rate\_of\_pmtd

from loans

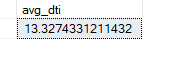
where month(issue\_date) = 11



**---avg\_dti**

select avg(dti)\*100 as avg\_dti

from loans

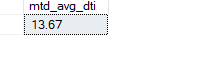


**---mtd**

select round(avg(dti),4)\*100 as mtd\_avg\_dti

from loans

where month(issue\_date) = 12



**--pmtd**

select round(avg(dti),4)\*100 as pmtd\_avg\_dti

from loans

where month(issue\_date) = 11



**----caliculate the good lone percentage**

**select \* from loans**

SELECT

loan\_status,

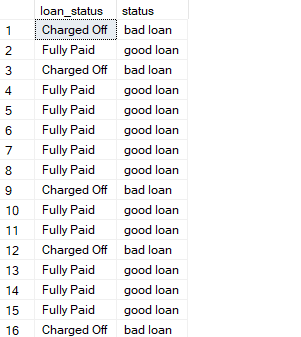
CASE

WHEN loan\_status IN ('fully paid', 'current') THEN 'good loan'

ELSE 'bad loan'

END AS status

FROM loans

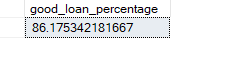


select

(count(case WHEN loan\_status IN ('fully paid', 'current') then id

end) \* 100.0) / count(id) as good\_loan\_percentage

from loans

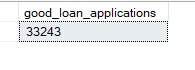


**----good loan applications**

select count(id) as good\_loan\_applications

from loans

where loan\_status in ('fully paid', 'current')

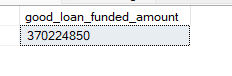


**----good lone funded amount**

select sum(loan\_amount) as good\_loan\_funded\_amount

from loans

where loan\_status in ('fully paid', 'current')



**----good lone received amount**

select sum(total\_payment) as good\_loan\_received\_amount

from loans

where loan\_status in ('fully paid', 'current')



**----bad loan applications**

select count(id) as bad\_loan\_applications

from loans

where loan\_status = 'charged off'



**----bad lone funded amount**

select sum(loan\_amount) as bad\_loan\_funded\_amount

from loans

where loan\_status = 'charged off'



**----bad lone received amount**

select sum(total\_payment) as bad\_loan\_received\_amount

from loans

where loan\_status = 'charged off'



**---lone status**

select

loan\_status,

count(id) as total\_applications,

sum (loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount,

avg(int\_rate \* 100) as avg\_intrest\_rate,

avg(dti \* 100) as avg\_dti

from loans

group by loan\_status

select

loan\_status,

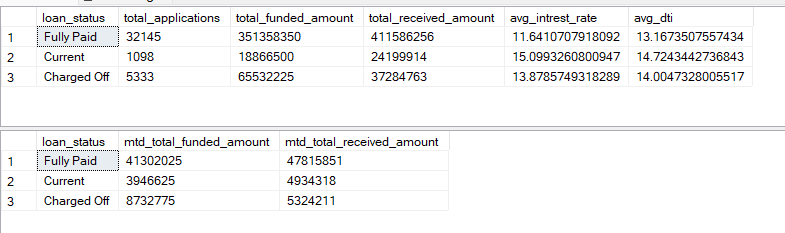
sum (loan\_amount) as mtd\_total\_funded\_amount,

sum(total\_payment) as mtd\_total\_received\_amount

from loans

where month(issue\_date) = 12

group by loan\_status



**----monthaly trend by issue date**

select

month(issue\_date) as month\_number,

datename(month,issue\_date) as month\_name,

count(id) as total\_loan\_applications,

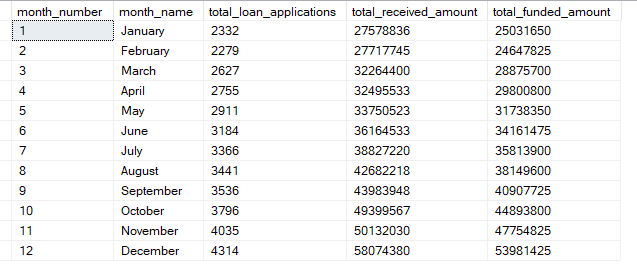
sum(total\_payment) as total\_received\_amount,

sum(loan\_amount) as total\_funded\_amount

from loans

group by month(issue\_date),datename(month,issue\_date)

order by month(issue\_date)



**---reginal analysis by state**

select

address\_state as state,

count(id) as total\_loan\_applications,

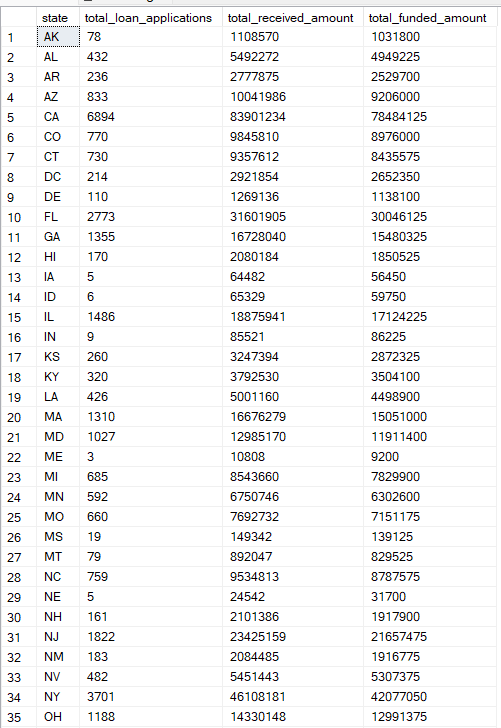
sum(total\_payment) as total\_received\_amount,

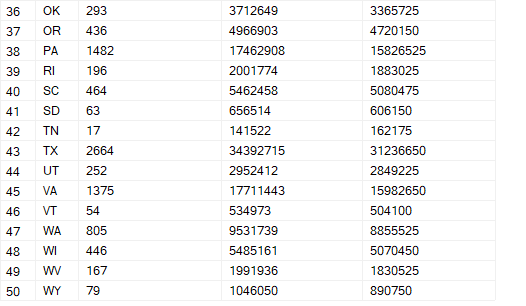
sum(loan\_amount) as total\_funded\_amount

from loans

group by address\_state

order by address\_state





**---loan terma analysis**

select

term,

count(id) as total\_loan\_applications,

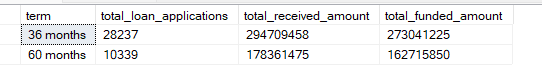
sum(total\_payment) as total\_received\_amount,

sum(loan\_amount) as total\_funded\_amount

from loans

group by term

order by term



---lengh analysis

select

emp\_length,

count(id) as total\_loan\_applications,

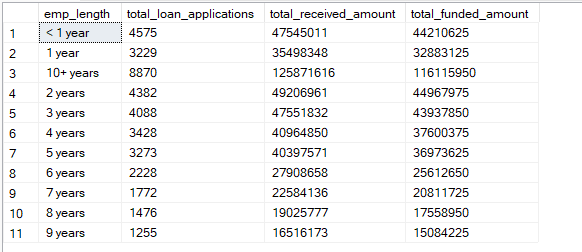
sum(total\_payment) as total\_received\_amount,

sum(loan\_amount) as total\_funded\_amount

from loans

group by emp\_length

order by emp\_length



**--lone purpose analysis**

select

purpose,

count(id) as total\_loan\_applications,

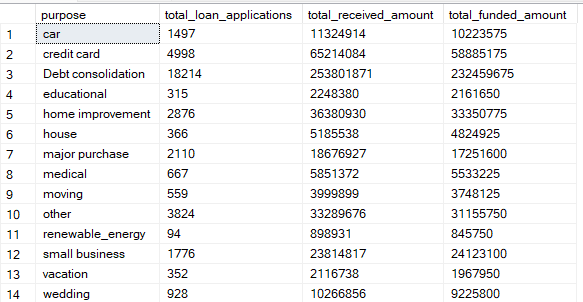
sum(total\_payment) as total\_received\_amount,

sum(loan\_amount) as total\_funded\_amount

from loans

group by purpose

order by purpose



**---home ownershi anlysis**

select

home\_ownership,

count(id) as total\_loan\_applications,

sum(total\_payment) as total\_received\_amount,

sum(loan\_amount) as total\_funded\_amount

from loans

group by home\_ownership

order by home\_ownership

