1. Queries for generating reports:

/\* top 10 vendors with highest transactions \*/

select vendor, count(\*)

from ts51786p.pcard\_stage

group by vendor

having count(\*) > 20

order by count(\*) DESC

LIMIT 10;

/\* top 10 vendors with highest sales \*/

select vendor, sum(amount)

from ts51786p.pcard\_stage

group by 1

having sum(amount)>10000

order by sum(amount) DESC

LIMIT 10;

/\* bottom 10 vendors with lowest transactions \*/

select vendor, count(\*)

from ts51786p.pcard\_stage

group by vendor

order by count(\*) ASC

LIMIT 10;

/\* bottom 10 vendors with lowest sales \*/

select vendor, sum(amount)

from ts51786p.pcard\_stage

group by 1

order by sum(amount) ASC

LIMIT 10;

/\*Top 10 vendors with highest merchant\_category\_codes \*/

select vendor, count(distinct merchant\_category\_code),group\_concat(distinct merchant\_category\_code)

from ts51786p.pcard\_stage

group by vendor

order by count(distinct merchant\_category\_code) DESC

LIMIT 10;

/\*Top 10 purchases with highest sales \*/

select description, sum(amount)

from ts51786p.pcard\_stage

group by 1

having sum(amount)>100

order by sum(amount) DESC

LIMIT 10;

/\*Bottom 10 purchases with lowest sales \*/

select description, sum(amount)

from ts51786p.pcard\_stage

group by 1

having sum(amount)> 0

order by sum(amount) ASC

LIMIT 10;

/\*Top 10 customers with highest purchases \*/

select card\_holder\_last\_name, card\_holder\_first\_name, sum(amount)

from ts51786p.pcard\_stage

group by 1,2

having sum(amount) > 100

order by sum(amount) DESC

limit 10;

/\*top 10 agencies which sold most credit cards\*/

select agency\_number, agency\_name,

count(distinct card\_holder\_last\_name, card\_holder\_first\_name) as count1

from ts51786p.pcard\_stage

group by 1,2

having count1 > 1

order by count1 DESC

limit 10;

/\*Top purchaser of each vendor with amount of purchase > 10000\*/

select card\_holder\_last\_name, card\_holder\_first\_name, vendor, sum(amount)

from ts51786p.pcard\_stage

group by 1,2 ,3

having sum(amount) > 10000

order by sum(amount) DESC

/\*Top 10 days when purchase was the highest\*/

select transaction\_date, sum(amount)

from ts51786p.pcard\_stage

group by 1

having sum(amount) > 1

order by sum(amount) DESC

LIMIT 10;

/\*Which day had highest sale for each vendor\*/

select transaction\_date, vendor, rank1, sum\_amt

from (

select transaction\_date, vendor, rank() over (partition by vendor order by sum(amount) DESC) as rank1, sum(amount) as sum\_amt

from ts51786p.pcard\_stage

group by transaction\_date,vendor

having sum(amount) > 1

order by sum(amount) DESC

)a

where rank1 = 1