

### 1. Top 10 ATMs where most transactions are in the 'inactive' state

```
with total as (select FA.atm_id, count(trans_id) as total_transactions
from atm_trans.FACT_ATM_TRANS FA
group by FA.atm_id),
inactive as (select FA.atm_id, count(trans_id) as total_inactive_transactions
from atm_trans.FACT_ATM_TRANS FA
where FA.atm_status = 'Inactive'
group by FA.atm_id)
select A.atm_number, A.atm_manufacturer, L.location,
T.total_transactions as total_transaction_count,
I.total_inactive_transactions as inactive_count,
ROUND((100.0 * inactive_count)/ total_transaction_count, 4) as inactive_count_percent
from total T, inactive I, atm_trans.DIM_LOCATION L, atm_trans.DIM_ATM A
where T.atm_id = I.atm_id and A.atm_location_id = L.location_id and A.atm_id = T.atm_id
order by inactive_count desc
Limit 10;
```

atm_number ▼	atm_manufacturer ▽	location ▽	total_transaction_count ▽	inactive_count ♥	inactive_count_percen t    ▽
16	NCR	Skive	44043	44043	100.0000
12	NCR	$ ilde{A} f  ilde{E}  ilde{cester}  ilde{A} f  ilde{A}  ilde{Y}  ext{ Duus}$	33982	33982	100.0000
2	NCR	Vejgaard	33725	33725	100.0000
88	NCR	Storcenter indg. A	32183	32183	100.0000
30	NCR	Nyk $ ilde{A}f\hat{A}$ , bing Mors	30883	30883	100.0000
52	NCR	Fars $ ilde{A} f \hat{A}$ ,	27361	27361	100.0000
50	NCR	Aarhus	23416	23416	100.0000
29	NCR	Skelagervej 15	20773	20773	100.0000
81	NCR	Spar K $ ilde{A} f \hat{A}_{,}$ bmand Tornh $ ilde{A} f \hat{A}_{,}$ j	20148	20148	100.0000
102	NCR	Aalborg Storcenter Afd	18297	18297	100.0000

# 2. Number of ATM failures corresponding to the different weather conditions recorded at the time of the transactions

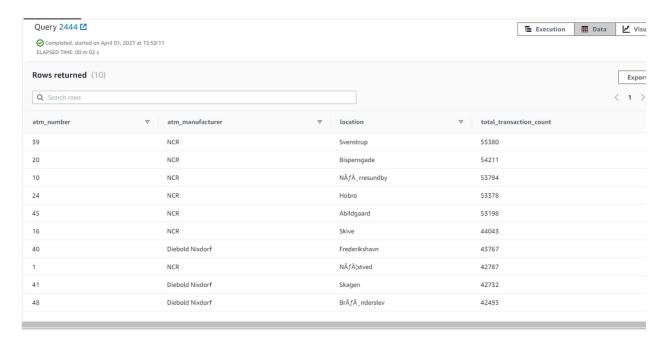
```
with total as (select weather_main,count(trans_id) as total_transaction_count
   from atm_trans.FACT_ATM_TRANS
   group by FACT_ATM_TRANS.weather_main),
inactive as (select weather main, count(trans id) as inactive count
   from atm_trans.FACT_ATM_TRANS
   where FACT_ATM_TRANS.atm_status = 'Inactive'
   group by FACT_ATM_TRANS.weather_main)
select
       total.weather_main,
  total.total transaction count,
  CASE WHEN inactive.inactive_count is NULL
  THEN 0 ELSE ROUND(inactive.inactive_count,1) END,
  CASE WHEN ROUND((100.0 * inactive_count)/ total.total_transaction_count, 4)IS NULL
  THEN 0 ELSE ROUND((100.0 * inactive_count)/ total.total_transaction_count, 4) END as
              inactive count percent
from
       total left outer join inactive
  on
  total.weather_main = inactive.weather_main
where total.weather_main <> "
order by inactive.inactive_count desc;
```

weather_main	▽	total_transaction_count	$\nabla$	round	$\triangledown$	inactive_count_percent	$\nabla$
Haze		3		0		0.0000	
Clouds		1181901		194027		16.4165	
Rain		545135		86017		15.7790	
Clear		543949		85531		15.7241	
Mist		82801		12864		15.5360	
Drizzle		62530		8670		13.8653	
Snow		23405		4813		20.5640	
Fog		18174		3729		20.5183	
Thunderstorm		2549		361		14.1624	
TORNADO		38		1		2.6316	

## 3. Top 10 ATMs with the most number of transactions throughout the year

select A.atm\_number,A.atm\_manufacturer, L.location, count(FA.trans\_id) as total\_transaction\_count

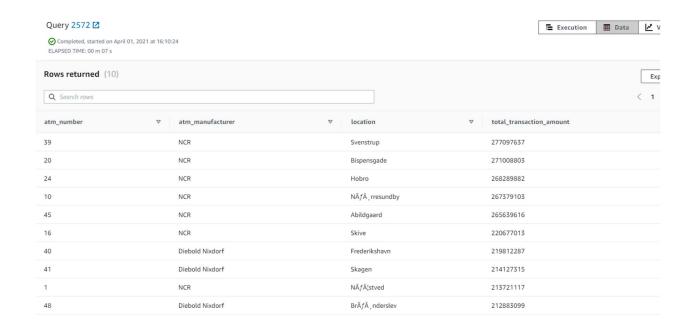
from atm\_trans.FACT\_ATM\_TRANS FA, atm\_trans.DIM\_ATM A, atm\_trans.DIM\_LOCATION L where FA.atm\_id = A.atm\_id and A.atm\_location\_id = L.location\_id group by A.atm\_number,A.atm\_manufacturer, L.location order by total\_transaction\_count desc limit 10;



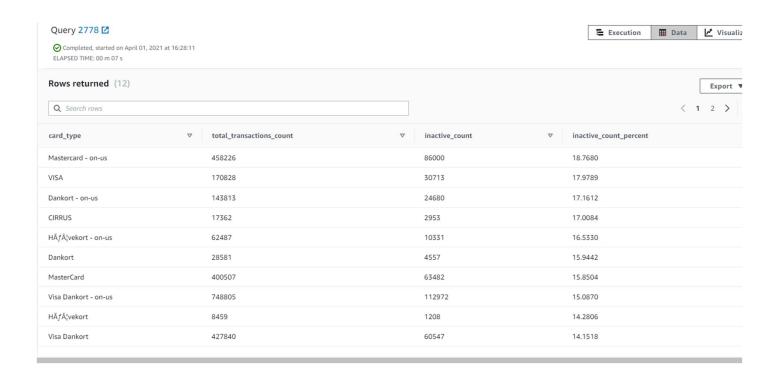
## 4. Number of overall ATM transactions going inactive per month for each month

Query 2357  ⊘ Completed, s ELAPSED TIME:	started on April 01,	, 2021 at 15:51:24						Execution #	Data	<u></u>	Visu
Rows returned (12)  Q. Search rows									E	xpor	
									1 2	>	
year	$\triangledown$	month	▽	total_transactions_count	▽	inactive_count	▽	inactive_count_percent			
2017		April		218865		41830		19.1122			
2017		March		209586		41046		19.5843			
2017		July		227682		38139		16.7510			
2017		May		222418		37679		16.9406			
2017		June		225166		36789		16.3386			
2017		August		217218		36713		16.9015			
2017		February		182659		36656		20.0680			
2017		January		180195		35953		19.9523			
2017		September		202101		28913		14.3062			
2017		October		191667		21780		11.3635			

## 5. Top 10 ATMs with the highest total amount withdrawn throughout the year



### 6. Number of failed ATM transactions across various card types



7. Top 10 records with the number of transactions ordered by the ATM\_number, ATM\_manufacturer, location, weekend\_flag and then total\_transaction\_count, on weekdays and on weekends throughout the year

atm_number ▽	atm_manufacturer ▽	location $\nabla$	weekend_flag ▽	total_transaction_count
1	NCR	N $\tilde{A}f\hat{A}^{I}_{I}$ stved	0	32711
1	NCR	$N\tilde{A}f\hat{A}_{I}^{I}$ stved	1	10076
10	NCR	$N\tilde{A}f\hat{A}$ , rresundby	0	41667
10	NCR	$N\tilde{A}f\hat{A}$ , rresundby	1	12127
100	NCR	Intern Skive	0	17812
100	NCR	Intern Skive	1	1
101	NCR	Bryggen Vejle	0	11693
101	NCR	Bryggen Vejle	1	3247
102	NCR	Aalborg Storcenter Afd	0	14556
102	NCR	Aalborg Storcenter Afd	1	3741

### 8. Most active day in each ATMs from location "Vejgaard"

```
with total count as
        (select A.atm number, A.atm manufacturer, L.location, D.weekday,
        count(FA.trans id) total transaction count
       from atm_trans.FACT_ATM_TRANS FA,
        atm trans.DIM ATM A,
        atm_trans.DIM_LOCATION L,
        atm trans.DIM DATE D
      where FA.atm id = A.atm id and
         A.atm location id = L.location id and
        L.location = 'Vejgaard' and
         D.date\ id = FA.date\ id
     group by A.atm_number, A.atm_manufacturer, L.location, D.weekday
     order by total transaction count desc),
max count as
        (select atm_number, MAX(total_transaction_count) total_transaction_count
        from total_count
         group by atm number)
select M.atm_number, T.atm_manufacturer, T.location, T.weekday, M.total_transaction_count
from total count T, max count M
where T.atm number = M.atm number and M.total transaction count =
         T.total_transaction_count;
```

