

1. Drinkers who like the most beers (highest number of beers)

Select distinct l.drinker, count(*) from Likes l group by l.drinker having count(*) = (select count(*) from Likes l2 group by l2.drinker order by count(*) desc limit 1);

Result Grid

Filter Rows:

Exports:

Wrap Cell Content:

| | |
|---------|----------|
| drinker | count(*) |
| Mike | 9 |

Result 1

Output

Action Output

| # | Time | Action | Message |
|---|----------|--|-------------------|
| 1 | 15:25:41 | Select distinct l.drinker, count(*) from Likes l group by l.drinker having count(*) = (select count(*) from Likes l2 group by l2.drinker order by count(*) desc limit 1) LIMIT 0, 1000 | 1 row(s) returned |

2. Bars which sell most expensive Blue Moon and are not frequented by Gunjan

select tableA.bar from (select distinct s.bar from Sells s where s.beer = 'Budweiser' and 0 = (select count(*) from (select s1.* from Sells s1 where s1.beer = 'Budweiser') a where a.price > s.price and a.beer = 'Budweiser')) tableA join (select distinct f.bar from Frequents f where f.bar != (select f1.bar from Frequents f1 where f1.drinker = 'Gunjan')) tableB on tableA.bar = tableB.bar;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

| |
|---------|
| bar |
| Caravan |

Result 2

Output

Action Output

| # | Time | Action | Message |
|---|----------|--|-------------------|
| 1 | 15:25:41 | Select distinct l.drinker, count(*) from Likes l group by l.drinker having count(*) = (select count(*) from Likes l2 group by l2.drinker order by count(*) desc limit 1) LIMIT 0, 1000 | 1 row(s) returned |
| 2 | 15:26:35 | select tableA.bar from (select distinct s.bar from Sells s where s.beer = 'Budweiser' and 0 = (select count(*) from (select s1.* from Sells s1 where s1.beer = 'Budweiser') a where a.price > s.price and a.beer = 'Budweiser')) tabl... | 1 row(s) returned |

3. Drinkers who frequent only bars which serve all beers they like

select distinct l.drinker from Likes l, Frequents f, (select l1.drinker, count(*) as coun from Likes l1 group by l1.drinker) a where a.coun = (select count(*) from (select distinct s1.bar, s1.beer from Sells s1 where l.beer = s1.beer AND l.drinker = f.drinker AND f.bar = s1.bar) b group by b.bar) AND a.drinker = l.drinker;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

drinker

Jesse

Result 4

Output

Action Output

| # | Time | Action | Message |
|---|----------|---|-------------------|
| 1 | 15:25:41 | Select distinct l.drinker, count(*) from Likes l group by l.drinker having count(*) = (select count(*) from Likes l2 group by l2.drinker order by count(*) desc limit 1) LIMIT 0, 1000 | 1 row(s) returned |
| 2 | 15:26:35 | select tableA.bar from (select distinct s.bar from Sells s where s.beer = 'Budweiser' and 0 = (select count(*) from (select s1.* from Sells s1 where s1.beer = 'Budweiser') a where a.price > s.price and a.beer = 'Budweiser')) tabl ... | 1 row(s) returned |
| 3 | 15:27:08 | select distinct * from Likes l, Frequents f, (select l1.drinker, count(*) as coun from Likes l1 group by l1.drinker) a where a.coun = (select count(*) from (select distinct s1.bar, s1.beer from Sells s1 where l.beer = s1.beer AND l ... | 1 row(s) returned |
| 4 | 15:27:39 | select distinct l.drinker from Likes l, Frequents f, (select l1.drinker, count(*) as coun from Likes l1 group by l1.drinker) a where a.coun = (select count(*) from (select distinct s1.bar, s1.beer from Sells s1 where l.beer = s1.beer ... | 1 row(s) returned |

4. Drinkers who frequent most popular bar (the one with highest count of drinkers)

Select distinct f2.drinker from Frequents f2 join (Select f.bar, count(*) from Frequents f group by f.bar having count(*) = (select count(*) from Frequents f group by f.bar order by count(*) desc limit 1)) a on f2.bar = a.bar;

| Result Grid | | | |
|-------------------------------|--|--|--|
| Filter Rows: | | | |
| Exports: Wrap Cell Content: | | | |
| drinker | | | |
| Bob | | | |
| Erik | | | |
| Herb | | | |
| Jesse | | | |
| Joe | | | |

| Result 5 | | | |
|----------|----------|---|--------------------|
| Output | | | |
| # | Time | Action | Message |
| 1 | 15:25:41 | Select distinct f2.drinker, count(*) from Frequents f2 join (select f.bar, count(*) from Frequents f group by f.bar having count(*) = (select count(*) from Frequents f group by f.bar order by count(*) desc limit 1) LIMIT 0, 1000 | 1 row(s) returned |
| 2 | 15:26:35 | select tableA.bar from (select distinct s.bar from Sells s where s.beer = 'Budweiser' and 0 = (select count(*) from (select s1.* from Sells s1 where s1.beer = 'Budweiser') a where a.price > s.price and a.beer = 'Budweiser')) tabl... | 1 row(s) returned |
| 3 | 15:27:08 | select distinct * from Likes l, Frequents f, (select l1.drinker, count(*) as coun from Likes l1 group by l1.drinker) a where a.coun = (select count(*) from (select distinct s1.bar, s1.beer from Sells s1 where l.beer = s1.beer AND l... | 1 row(s) returned |
| 4 | 15:27:39 | select distinct f.drinker from Likes l, Frequents f, (select l1.drinker, count(*) as coun from Likes l1 group by l1.drinker) a where a.coun = (select count(*) from (select distinct s1.bar, s1.beer from Sells s1 where l.beer = s1.beer ... | 1 row(s) returned |
| 5 | 15:28:24 | Select distinct f2.drinker from Frequents f2 join (Select f.bar, count(*) from Frequents f group by f.bar having count(*) = (select count(*) from Frequents f group by f.bar order by count(*) desc limit 1)) a on f2.bar = a.bar LIMIT ... | 14 row(s) returned |

5 Precinct(s) which collected the least number of total votes by end of day of November 5th 2020

Two approaches depend on my understanding of this question

first one: total votes only in day of November 5th 2020

select distinct p1.precinct, p1.totalvotes from penna p1 where Timestamp like '2020-11-05 23:56%' AND totalvotes = (select p.totalvotes from penna p where Timestamp like '2020-11-05 23:56%' order by totalvotes ASC limit 1);

| Result Grid | | | |
|-------------------------------|------------|--|--|
| Filter Rows: | | | |
| Exports: Wrap Cell Content: | | | |
| precinct | totalvotes | | |
| Franconia 2 | 8 | | |

| penna 1 | | | |
|---------|----------|--|-------------------|
| Output | | | |
| # | Time | Action | Message |
| 1 | 14:10:07 | select distinct p1.precinct, p1.totalvotes from penna p1 where Timestamp like '2020-11-05 23:56%' AND totalvotes = (select p.totalvotes from penna p where Timestamp like '2020-11-05 23:56%' order by totalvotes ASC limit... | 1 row(s) returned |

second one: total votes before and include day of November 5th 2020

select p.precinct, sum(p.totalvotes) as total from penna p where Timestamp like '2020-11-03%' or Timestamp like '2020-11-04%' or Timestamp like '2020-11-05%' group by p.precinct order by total ASC limit 1;

| Result Grid | | | |
|-------------|-----------------------------|-------|--|
| | precinct | total | |
| | Green Hills Voting Precinct | 451 | |

| Result 2 | | | |
|---------------|----------|---|-------------------|
| Output | | | |
| Action Output | | | |
| # | Time | Action | Message |
| 1 | 15:29:48 | select distinct p1.precinct, p1.totalvotes from penna p1 where Timestamp like '2020-11-05%' AND totalvotes = (select p.totalvotes from penna p where Timestamp like '2020-11-05%' order by totalvotes ASC limit 1) LIMIT 0, ... | 1 row(s) returned |
| 2 | 15:30:15 | select p.precinct, sum(p.totalvotes) as total from penna p where Timestamp like '2020-11-03%' or Timestamp like '2020-11-04%' or Timestamp like '2020-11-05%' group by p.precinct order by total ASC limit 1 | 1 row(s) returned |

6. Which precincts did Trump win by more than 100 votes in 2020

select distinct precinct from penna where Timestamp like '2020%' AND (Trump - Biden) > 100;

| Result Grid | | | |
|-------------|---|--|--|
| | precinct | | |
| | Adams Township - Dunlo Voting Precinct | | |
| | Adams Township - Elton Voting Precinct | | |
| | Adams Township - St. Michael Voting Precinct | | |
| | Adams Township No. 1 Voting Precinct | | |
| | Adams Township - Gramlingtown Voting Precinct | | |
| | Allegheny Township Voting Precinct | | |
| | Barr Township Voting Precinct | | |
| | Blacklick Township Voting Precinct | | |
| | Cambria Township - Calver Voting Precinct | | |
| | Cambria Township - Revloc Voting Precinct | | |
| | Cambria Township No. 1 Voting Precinct | | |
| | Cambria Township No. 4 Voting Precinct | | |
| | Carrolltown Borough Voting Precinct | | |
| | Chest Township Voting Precinct | | |

| penna 1 | | | |
|---------------|----------|--|---------------------|
| Output | | | |
| Action Output | | | |
| # | Time | Action | Message |
| 1 | 19:09:13 | select distinct precinct from penna where Timestamp like '2020%' AND (Trump - Biden) > 100 LIMIT 0, 1000 | 616 row(s) returned |

7. Has Trump ever led the total vote (for any of the timestamps)? (Return "Yes he did on <timestamp>" or "No he never did".

Two approaches depend on my understanding of this question

first one: "ever led the total vote" may understand as "has trump won all the vote in a certain timestamp that biden won 0 vote"

```
select (case
when exists(select * from penna p where p.Trump = p.totalvotes)
then concat("Yes he did on", (select p1.Timestamp from penna p1 where p1.Trump =
p1.totalvotes limit 1))
else 'No he never did'
end) as result;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

result

Yes he did on2020-11-04 03:58:36

Result 4

Output

Action Output

| # | Time | Action | Message |
|---|----------|--|----------------------|
| 1 | 15:29:48 | select distinct p1.precinct, p1.totalvotes from penna p1 where Timestamp like '2020-11-05%' AND totalvotes = (select p.totalvotes from penna p where Timestamp like '2020-11-05%' order by totalvotes ASC limit 1) LIMIT 0, ... | 1 row(s) returned |
| 2 | 15:30:15 | select p.precinct, sum(p.totalvotes) as total from penna p where Timestamp like '2020-11-03%' or Timestamp like '2020-11-04%' or Timestamp like '2020-11-05%' group by p.precinct order by total ASC limit 1 | 1 row(s) returned |
| 3 | 15:30:47 | select * from penna where Timestamp like '2020%' AND (Trump - Biden >= 100) LIMIT 0, 1000 | 1000 row(s) returned |
| 4 | 15:31:21 | select (case when exists(select * from penna p where p.Triump = p1.totalvotes) then concat('Yes he did on', (select p1.Timestamp from penna p1 where p1.Triump = p1.totalvotes limit 1)) else 'No he never did' end) as result LI... | 1 row(s) returned |

#second one: it may understand as "have the sum of trump's vote bigger than the sum of biden's vote in a certain timestamp"

```
select (case
when exists(select * from (select p.Timestamp as times, sum(p.Biden) as b, sum(p.Trump) as t
from penna p group by p.Timestamp) a where a.t > a.b)
then concat('Yes he did on', (select b.times from (select p.Timestamp as times, sum(p.Biden) as
b, sum(p.Trump) as t from penna p group by p.Timestamp) b where b.t > b.b))
else 'No he never did'
end) as result;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Contents:

| |
|-----------------|
| result |
| No he never did |

Result 5

Output

Action Output

| # | Time | Action | Message |
|---|----------|--|----------------------|
| 1 | 15:29:48 | select distinct p1.precinct, p1.totalvotes from penna p1 where Timestamp like '2020-11-05%' AND totalvotes = (select p.totalvotes from penna p where Timestamp like '2020-11-05%' order by totalvotes ASC limit 1) LIMIT 0, ... | 1 row(s) returned |
| 2 | 15:30:15 | select p.precinct, sum(p.totalvotes) as total from penna p where Timestamp like '2020-11-03%' or Timestamp like '2020-11-04%' or Timestamp like '2020-11-05%' group by p.precinct order by total ASC limit 1 | 1 row(s) returned |
| 3 | 15:30:47 | select * from penna where Timestamp like '2020%' AND (Trump - Biden >= 100) LIMIT 0, 1000 | 1000 row(s) returned |
| 4 | 15:31:21 | select (case when exists(select * from penna p where p.Trump = p1.totalvotes) then concat('Yes he did on', (select p1.Timestamp from penna p1 where p1.Trump = p1.totalvotes limit 1)) else 'No he never did' end) as result LI... | 1 row(s) returned |
| 5 | 15:31:52 | select (case when exists(select * from (select p.Timestamp as times, sum(p.Biden) as b, sum(p.Trump) as t from penna p group by p.Timestamp) a where a.t > a.b) then concat('Yes he did on', (select b.times from (select p.Ti... | 1 row(s) returned |