

SQL Queries II

CS 210 - Principles of Information and Data Management

1. Drinkers who like the most beers (highest number of beers) ```sql SELECT DISTINCT drinker FROM Likes GROUP BY drinker HAVING count(*)=(SELECT count(*) as c1 FROM Likes GROUP BY drinker ORDER BY c1 DESC LIMIT 1 ```

```
# drinker
'Mike'
```

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

```
SELECT DISTINCT s.bar
FROM
    Sells s,
    Frequents f,
    (SELECT MAX(price) as MaxPrice FROM Sells WHERE beer='Budweiser') as mp
WHERE
    s.beer='Budweiser'
    AND s.price=mp.MaxPrice
    AND f.drinker='Gunjan'
    AND f.bar=s.bar;
```

```
# bar
```

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

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

```
SELECT DISTINCT f.drinker
FROM
    Frequents f,
    (
        SELECT bar, count(*) as num_drinkers
        FROM Frequents
        GROUP BY bar
        ORDER BY count(*) DESC
    )
```

```
        LIMIT 1
    ) AS c
WHERE f.bar = c.bar;
```

```
# drinker
'Bob'
'Erik'
'Herb'
'Jesse'
'Joe'
'John'
'Justin'
'Mike'
'Rebecca'
'Tom'
'Vince'
'Jeanie'
'Tatiana'
'Yuhan'
```

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

```
SELECT DISTINCT p1.precinct
FROM Penna p1
WHERE p1.Timestamp LIKE '2020-11-05 %'
GROUP BY precinct
HAVING MAX(p1.totalvotes)=(
    SELECT MAX(totalvotes) as t2
    From Penna as p
    WHERE p.Timestamp LIKE '2020-11-05 %'
    GROUP BY p.precinct
    ORDER BY t2 ASC
    LIMIT 1
);
```

```
# precinct
'Franconia 2'
```

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

```

SELECT
    DISTINCT IF(SUM(Trump) - SUM(Biden) > 100,
        precinct,
        0) Result
FROM
    Penna,
    (SELECT
        precinct,
        MAX(Timestamp) as t
    FROM
        Penna) p
WHERE
    Timestamp = p.Timestamp
GROUP BY precinct
HAVING Result != 0

```

```

# Result
'043 W BRANDYWINE W'
'060 W CALN 1'
'061 W CALN 2'
'165 E COVENTRY 2'
'215 ELK'
'220 ELVERSON'
'235 W FALLOWFIELD'
'290 HIGHLAND'
'295 HONEY BROOK BORO'
'300 HONEYBROOK TWP 1'
'301 HONEYBROOK TWP 2'
'335 LONDONDERRY'
'380 W NANTMEAL'
'405 EAST NOTTINGHAM EAST'
'406 EAST NOTTINGHAM WEST'
'410 W NOTTINGHAM'
'430 LOWER OXFORD W'
'435 UPPER OXFORD'
'545 W SADSBUY'
'705 WARWICK W'
'26-01'
'26-02'
'26-03'
'26-04'

```

'26-05 '
'26-06 '
'26-07 '
'26-09 '
'39-36 '
'39-41 '
'45-01 '
'45-03 '
'45-04 '
'45-05 '
'45-20 '
'45-23 '
'45-25 '
'57-13 '
'57-14 '
'57-17 '
'58-04 '
'58-21 '
'58-33 '
'58-35 '
'58-39 '
'58-41 '
'63-03 '
'63-17 '
'65-01 '
'65-02 '
'65-07 '
'66-06 '
'66-09 '
'66-14 '
'66-29 '
'66-34 '
'66-36 '
'66-43 '
'66-45 '

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

```
SELECT
    CONCAT(
        IF(Trump>Biden, "Yes he did on ", "No he never did"),
        IF(Trump>Biden, Timestamp, "")
    )
FROM Penna1
LIMIT 1;
```

```
# CONCAT(
    IF(Trump>Biden, "Yes he did on ", "No he never did"),
    IF(Trump>Biden, Timestamp, "")
)
'Yes he did on 2020-11-04 03:58:36'
```