Q1:List top 5 / bottom 5 constituencies of 2014 and 2019 in terms of voter turnout ratio?

Part a: Top 5 constituencies in terms of voter turnout 2014.
SQL code:

```
select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
    from 2014_result
    group by pc_name,state
    order by voter_turnout_ratio
    desc limit 5;
```

select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
from 2014_result
group by pc_name,state
order by voter_turnout_ratio
desc limit 5;

Output :

| pc_name | state | voter_turnout_ratio |
|---|---|---|
| Dhubri | Assam | 88.35 |
| Nagaland | Nagaland | 87.82 |
| Tamluk | West Bengal | 87.59 |
| Bishnupur | West Bengal | 86.72 |
| Kanthi | West Bengal | 86.61 |

Part b: Top 5 constituencies in terms of voter turnout 2019.
SQL code:

```
select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
    from 2019_result
    group by pc_name,state
    order by voter_turnout_ratio
    desc limit 5;
```

select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
from 2019_result
group by pc_name,state
order by voter_turnout_ratio
desc limit 5;

Output :

| pc_name | state | voter_turnout_ratio |
|---|---|---|
| Dhubri | Assam | 90.66 |
| Bishnupur | West Bengal | 87.31 |
| Barpeta | Assam | 86.55 |
| Jalpaiguri | West Bengal | 86.49 |
| ARUNACHAL EAST | Arunachal Pradesh | 86.46 |

Part c: Bottom 5 constituencies in terms of voter turnout 2014.
SQL code:

```
select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
    from 2014_result
    group by pc_name,state
    order by voter_turnout_ratio
    asc limit 5;
```

select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
from 2014_result
group by pc_name,state
order by voter_turnout_ratio
asc limit 5;

Output :

| | pc_name | state | voter_turnout_ratio |
|---|---|---|---|
| ▶ | Garhwal | Uttarakhand | 21.12 |
| | Kheda | Gujarat | 22.97 |
| | Srinagar | Jammu & Kashmir | 25.45 |
| | Satara | Maharashtra | 25.79 |
| | Anantnag | Jammu & Kashmir | 28.39 |

Part d: Bottom 5 constituencies in terms of voter turnout 2019.
SQL code:

```
select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
    from 2019_result
    group by pc_name,state
    order by voter_turnout_ratio
    asc limit 5;
```

select pc_name,state, round((sum(total_votes)/max(total_electors))*100,2) as voter_turnout_ratio
from 2019_result
group by pc_name,state
order by voter_turnout_ratio
asc limit 5;

Output :

| | pc_name | state | voter_turnout_ratio |
|---|---|---|---|
| ▶ | Anantnag | Jammu & Kashmir | 8.94 |
| | Srinagar | Jammu & Kashmir | 14.43 |
| | Baramulla | Jammu & Kashmir | 34.57 |
| | Hyderabad | Telangana | 44.84 |
| | Kalyan | Maharashtra | 45.29 |

Q2: List top 5 / bottom 5 states of 2014 and 2019 in terms of voter turnout ratio?

Part a: Top 5 states in terms of voter turnout 2014.
SQL code:

```
46 •  select state,
47        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
48        from (select state,pc_name,sum(total_votes) as total_votes,
49                    max(total_electors) as total_available_votes
50                from 2014_result
51                group by state,pc_name) as subquery
52    group by state
53    order by voter_turnout_ratio desc
54    limit 5;
```

```
select state,
        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
    from (select state,pc_name,sum(total_votes) as total_votes,
                                max(total_electors) as total_available_votes
                        from 2014_result
                        group by state,pc_name) as subquery
group by state
order by voter_turnout_ratio desc
limit 5;
```

Output :

| | state | voter_turnout_ratio |
|---|---|---|
| ▶ | Nagaland | 87.82 |
| | Lakshadweep | 86.61 |
| | Tripura | 84.72 |
| | Dadra & Nagar Haveli | 84.07 |
| | Sikkim | 83.33 |

Part b: Top 5 states in terms of voter turnout 2019.
SQL code:

```
select state,
        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
    from (select state,pc_name,sum(total_votes) as total_votes,
```

```
                    max(total_electors) as total_available_votes
                from 2019_result
                group by state,pc_name) as subquery
group by state
order by voter_turnout_ratio desc
limit 5;
```

```
57 •  select state,
58        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
59        from (select state,pc_name,sum(total_votes) as total_votes,
60                    max(total_electors) as total_available_votes
61                from 2019_result
62                group by state,pc_name) as subquery
63    group by state
64    order by voter_turnout_ratio desc
65    limit 5;
```

Output :

| | state | voter_turnout_ratio |
|---|---|---|
| ▶ | Lakshadweep | 85.18 |
| | Nagaland | 82.91 |
| | Manipur | 82.54 |
| | Tripura | 82.35 |
| | West Bengal | 81.72 |

Part c: Bottom 5 states in terms of voter turnout 2014.

SQL code:

```
select state,
        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
    from (select state,pc_name,sum(total_votes) as total_votes,
                    max(total_electors) as total_available_votes
                from 2014_result
                group by state,pc_name) as subquery
group by state
order by voter_turnout_ratio
limit 5;
```

```
68 •  select state,
69        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
70        from (select state,pc_name,sum(total_votes) as total_votes,
71                    max(total_electors) as total_available_votes
72                from 2014_result
73                group by state,pc_name) as subquery
74    group by state
75    order by voter_turnout_ratio
76    limit 5;
```

Output :

| | state | voter_turnout_ratio |
|---|---|---|
| ▶ | Jammu & Kashmir | 49.66 |
| | Bihar | 56.25 |
| | Uttar Pradesh | 58.42 |
| | Maharashtra | 60.29 |
| | Madhya Pradesh | 61.59 |

Part d: Bottom 5 states in terms of voter turnout 2019.

SQL code:

```
select state,
        round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
   from (select state,pc_name,sum(total_votes) as total_votes,
                                    max(total_electors) as total_available_votes
                        from 2019_result
                        group by state,pc_name) as subquery
group by state
order by voter_turnout_ratio
limit 5;
```

```
79 •    select state,
80          round((sum(total_votes))/sum(total_available_votes)*100,2) as voter_turnout_ratio
81          from (select state,pc_name,sum(total_votes) as total_votes,
82                       max(total_electors) as total_available_votes
83                  from 2019_result
84                  group by state,pc_name) as subquery
85      group by state
86      order by voter_turnout_ratio
87      limit 5;
```

Output :

| | state | voter_turnout_ratio |
|---|---|---|
| ▶ | Jammu & Kashmir | 44.84 |
| | Bihar | 57.30 |
| | Uttar Pradesh | 59.18 |
| | NCT OF Delhi | 60.58 |
| | Maharashtra | 60.96 |

Q3: 3. Which constituencies have elected the same party for two consecutive elections, rank them by % of votes to that winning party in 2019

SQL code:

```
with cte1 as (
(
   SELECT *
   FROM 2014_result AS ind
   WHERE party = 'IND'
   AND (state, pc_name, total_votes) IN (
      SELECT state, pc_name, MAX(total_votes)
      FROM 2014_result
      WHERE party = 'IND'
      GROUP BY state, pc_name
   )
```

```
)
UNION ALL
(
   SELECT *
   FROM 2014_result AS others
   WHERE party != 'IND'
)),
cte2 as
((
   SELECT *
   FROM 2019_result AS ind
   WHERE party = 'IND'
   AND (state, pc_name, total_votes) IN (
      SELECT state, pc_name, MAX(total_votes)
      FROM 2019_result
      WHERE party = 'IND'
      GROUP BY state, pc_name
   )
)
UNION ALL
(
   SELECT *
   FROM 2019_result AS others
   WHERE party != 'IND'
))

select b.state,c.pc_name,b.party as 2014_winner,c.party as 2019_winner,
round((c.total_votes/c.total_electors)*100,2) as votes_2019_winner_ratio
from cte1 b
join cte2 c
on c.pc_name=b.pc_name and c.state=b.state
where
b.party = (
       SELECT party
       FROM cte1
       WHERE state = b.state AND pc_name = b.pc_name
       ORDER BY total_votes DESC
       LIMIT 1) and
b.party=c.party
 AND c.party = (
       SELECT party
       FROM cte2
       WHERE state = c.state AND pc_name = c.pc_name
       ORDER BY total_votes DESC
       LIMIT 1)
order by votes_2019_winner_ratio desc;
```

Output :

| | state | pc_name | 2014_winner | 2019_winner | votes_2019_winner_ratio |
|---|---|---|---|---|---|
| ▶ | Kerala | Wayanad | INC | INC | 51.95 |
| | Madhya Pradesh | HOSHANGABAD | BJP | BJP | 51.46 |
| | Himachal Pradesh | Kangra | BJP | BJP | 50.81 |
| | Himachal Pradesh | Mandi | BJP | BJP | 50.50 |
| | Karnataka | Uttara Kannada | BJP | BJP | 50.50 |
| | Assam | Dibrugarh | BJP | BJP | 50.18 |

Q4: 4. Which constituencies have voted for different parties in two elections (list top 10 based on difference (201 9-2014) in winner vote percentage in two elections)
SQL code:

```
with cte1 as (
(
   SELECT *
   FROM 2014_result AS ind
   WHERE party = 'IND'
   AND (state, pc_name, total_votes) IN (
      SELECT state, pc_name, MAX(total_votes)
      FROM 2014_result
      WHERE party = 'IND'
      GROUP BY state, pc_name
   )
)
UNION ALL
(
   SELECT *
   FROM 2014_result AS others
   WHERE party != 'IND'
)),
cte2 as
((
   SELECT *
   FROM 2019_result AS ind
   WHERE party = 'IND'
   AND (state, pc_name, total_votes) IN (
      SELECT state, pc_name, MAX(total_votes)
      FROM 2019_result
      WHERE party = 'IND'
      GROUP BY state, pc_name
   )
)
UNION ALL
```

```
(
    SELECT *
    FROM 2019_result AS others
    WHERE party != 'IND'
))
select b.state,c.pc_name,b.party as 2014_winner,c.party as 2019_winner,
round((b.total_votes/b.total_electors)*100,2) as 2014_ratio,
round((c.total_votes/c.total_electors)*100,2) as 2019_ratio,
abs(round((b.total_votes/b.total_electors)*100,2)-
round((c.total_votes/c.total_electors)*100,2) )as diff
from cte1 b
join cte2 c
on c.pc_name=b.pc_name and c.state=b.state
where
b.party = (
        SELECT party
        FROM cte1
        WHERE state = b.state AND pc_name = b.pc_name
        ORDER BY total_votes DESC
        LIMIT 1) and
b.party!=c.party
 AND c.party = (
        SELECT party
        FROM cte2
        WHERE state = c.state AND pc_name = c.pc_name
        ORDER BY total_votes DESC
        LIMIT 1)
order by diff desc limit 10;
```

Output :

| state | pc_name | 2014_winner | 2019_winner | 2014_ratio | 2019_ratio | diff |
|---|---|---|---|---|---|---|
| West Bengal | Alipurduars | AITC | BJP | 24.64 | 45.55 | 20.91 |
| Nagaland | Nagaland | NPF | NDPP | 60.30 | 41.24 | 19.06 |
| Assam | Autonomous District | INC | BJP | 30.35 | 47.91 | 17.56 |
| Puducherry | Puducherry | AINRC | INC | 28.38 | 45.71 | 17.33 |
| Tripura | Tripura East | CPM | BJP | 54.70 | 38.21 | 16.49 |
| Tamil Nadu | Kanniyakumari | BJP | INC | 25.41 | 41.78 | 16.37 |
| Karnataka | Chikkballapur | INC | BJP | 25.61 | 41.24 | 15.63 |
| Karnataka | Kolar | INC | BJP | 28.06 | 43.51 | 15.45 |
| Uttar Pradesh | Sambhal | BJP | SP | 21.28 | 35.98 | 14.70 |
| Bihar | Supaul | INC | JD(U) | 21.82 | 35.33 | 13.51 |

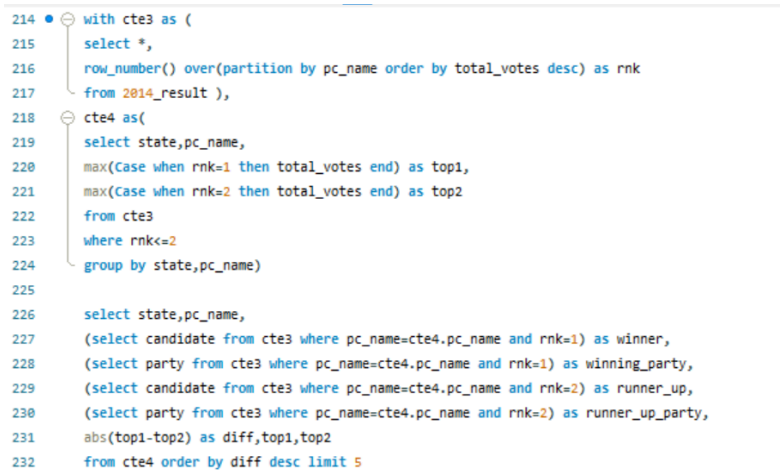
Q5: 5. Top 5 candidates based on margin difference with runners in 2014 and 2019.

Part a: Top 5 candidates based on margin difference with runners in 2014.

SQL code:

```
with cte3 as (
select *,
row_number() over(partition by pc_name order by total_votes desc) as rnk
from 2014_result ),
cte4 as(
select state,pc_name,
max(Case when rnk=1 then total_votes end) as top1,
max(Case when rnk=2 then total_votes end) as top2
from cte3
where rnk<=2
group by state,pc_name)

select state,pc_name,
(select candidate from cte3 where pc_name=cte4.pc_name and rnk=1) as winner,
(select party from cte3 where pc_name=cte4.pc_name and rnk=1) as winning_party,
(select candidate from cte3 where pc_name=cte4.pc_name and rnk=2) as runner_up,
(select party from cte3 where pc_name=cte4.pc_name and rnk=2) as runner_up_party,
abs(top1-top2) as diff,top1,top2
from cte4 order by diff desc limit 5;
```



Output :

| state | pc_name | winner | winning_party | runner_up | runner_up_party | diff |
|---|---|---|---|---|---|---|
| Gujarat | Vadodara | NARENDRA MODI | BJP | MISTRI MADHUSUDAN DEVRAM | INC | 570128 |
| Uttar Pradesh | Ghaziabad | VIJAY KUMAR SINGH | BJP | RAJ BABBAR | INC | 567260 |
| Gujarat | Navsari | C. R. PATIL | BJP | MAKSUD MIRZA | INC | 558116 |
| Rajasthan | Jaipur | RAMCHARAN BOHARA | BJP | DR. MAHESH JOSHI | INC | 539345 |
| Gujarat | Surat | DARSHANA VIKRAM JARDOSH | BJP | DESAI NAISHADHBHAI BHUPATBHAI | INC | 533190 |

Part b: Top 5 candidates based on margin difference with runners in 2019.
SQL code:

```
with cte5 as (
select *,
row_number() over(partition by pc_name order by total_votes desc) as rnk
from 2019_result ),
cte6 as(
select state,pc_name,
max(Case when rnk=1 then total_votes end) as top1,
max(Case when rnk=2 then total_votes end) as top2
from cte5
where rnk<=2
group by state,pc_name)

select state,pc_name,
(select candidate from cte5 where pc_name=cte6.pc_name and rnk=1) as winner,
(select party from cte5 where pc_name=cte6.pc_name and rnk=1) as winning_party,
(select candidate from cte5 where pc_name=cte6.pc_name and rnk=2) as runner_up,
(select party from cte5 where pc_name=cte6.pc_name and rnk=2) as runner_up_party,
abs(top1-top2) as diff,top1,top2
from cte6 order by diff desc limit 5;
```

Output :

| state | pc_name | winner | winning_party | runner_up | runner_up_party | diff |
|---|---|---|---|---|---|---|
| Gujarat | Navsari | C. R. Patil | BJP | PATEL DHARMESHBHAI BHIMBHAI | INC | 689668 |
| Haryana | Karnal | Sanjay Bhatia | BJP | Kuldip Sharma | INC | 656142 |
| Haryana | Faridabad | KRISHAN PAL | BJP | AVTAR SINGH BHADANA | INC | 638239 |
| Rajasthan | Bhilwara | SUBHASH CHANDRA BAHERIA | BJP | RAM PAL SHARMA | INC | 612000 |
| Gujarat | Vadodara | RANJANBEN BHATT | BJP | PRASHANT PATEL (TIKO) | INC | 589177 |

Q6: 6. % Split of votes of parties between 2014 vs 2019 at national level

Part a: % Split of votes of parties between 2014.
SQL code:

```
select party,round((tv/(select sum(total_votes) from 2014_result))*100,2) as voting_share
from
(select party,sum(total_votes) as tv from 2014_result group by party)
cte
order by voting_share desc;
```

```
258  select party,round((tv/(select sum(total_votes) from 2014_result))*100,2) as voting_share from
259  (
260  select party,sum(total_votes) as tv from 2014_result group by party) cte
261  order by voting_share desc;
262
```

Output :

| party | voting_share |
|---|---|
| BJP | 30.97 |
| INC | 18.58 |
| BSP | 4.31 |
| AITC | 4.08 |
| SP | 3.58 |
| ADMK | 3.48 |
| CPM | 3.45 |

Part b: % Split of votes of parties between 2019.

SQL code:

```
select party,round((tv/(select sum(total_votes) from 2019_result))*100,2) as voting_share
from
(select party,sum(total_votes) as tv from 2019_result group by party) cte
order by voting_share desc;
```

```
264  select party,round((tv/(select sum(total_votes) from 2019_result))*100,2) as voting_share from
265  (
266  select party,sum(total_votes) as tv from 2019_result group by party) cte
267  order by voting_share desc;
```

Output :

| party | voting_share |
|---|---|
| BJP | 37.30 |
| INC | 19.46 |
| AITC | 4.06 |
| BSP | 3.62 |
| IND | 2.70 |
| SP | 2.55 |
| YSRCP | 2.53 |

Q7: 7. % Split of votes of parties between 2014 vs 2019 at state level.

Part a: % Split of votes of parties between 2014.state

SQL code:

```
271 •   SELECT
272         2014_result.state,
273         2014_result.party,
274         ROUND(SUM(total_votes) / state_total_votes * 100, 2) AS voting_share_percentage
275     FROM
276         2014_result
277     JOIN (
278         SELECT
279             state,
280             SUM(total_votes) AS state_total_votes
281         FROM
282             2014_result
283         GROUP BY
284             state
285     ) AS state_votes ON 2014_result.state = state_votes.state
286     GROUP BY
287         state, party;
```

```
SELECT
    2014_result.state,
    2014_result.party,
    ROUND(SUM(total_votes) / state_total_votes * 100, 2) AS voting_share_percentage
FROM
    2014_result
JOIN (
    SELECT
        state,
        SUM(total_votes) AS state_total_votes
    FROM
        2014_result
    GROUP BY
        state
) AS state_votes ON 2014_result.state = state_votes.state
GROUP BY
    state, party;
```

Output :

| state | party | voting_share_percentage |
|---|---|---|
| Telangana | TRS | 13.93 |
| Telangana | INC | 11.53 |
| Telangana | TDP | 29.15 |
| Telangana | BSP | 0.82 |
| Telangana | IND | 1.96 |

Part b: % Split of votes of parties between 2019.state

SQL code:

```sql
SELECT
    2019_result.state,
    2019_result.party,
    ROUND(SUM(total_votes) / state_total_votes * 100, 2) AS voting_share_percentage
FROM
    2019_result
JOIN (
    SELECT
        state,
        SUM(total_votes) AS state_total_votes
    FROM
        2019_result
    GROUP BY
        state
) AS state_votes ON 2019_result.state = state_votes.state
GROUP BY
    state, party;
```

SELECT
    2019_result.state,
    2019_result.party,
    ROUND(SUM(total_votes) / state_total_votes * 100, 2) AS voting_share_percentage
FROM
    2019_result
JOIN (
    SELECT
        state,
        SUM(total_votes) AS state_total_votes
    FROM
        2019_result
    GROUP BY
        state
) AS state_votes ON 2019_result.state = state_votes.state
GROUP BY
    state, party;

Output

| state | party | voting_share_percentage |
|---|---|---|
| Andhra Pradesh | TDP | 39.59 |
| Andhra Pradesh | BJP | 0.96 |
| Andhra Pradesh | YSRCP | 49.15 |
| Andhra Pradesh | INC | 1.29 |
| Andhra Pradesh | JnP | 5.79 |

Q8: 8. List top 5 constituencies for two major national parties where they have gained vote share in 2019 as compared to 2014.

Part a: Top 5 constituencies in terms of voter turnout 2014 to 2019 growth for BJP .
SQL code:

```
311     -- for BJP
312 •   with cte as (
313     Select b.pc_name,b.total_votes as BJP_2014,c.total_votes as BJP_2019 from 2014_result b
314     join 2019_result c on b.pc_name=c.pc_name and b.total_votes<c.total_votes
315     where b.party="BJP" and c.party="BJP")
316     select pc_name,BJP_2014,BJP_2019,round(((BJP_2019-BJP_2014)/(BJP_2014))*100,2) as votes_gain
317     from cte order by votes_gain desc limit 5;
```

```
select party,sum(total_votes) as total from 2014_result group by party order by total desc
limit 2;
with cte as (
Select b.pc_name,b.total_votes as BJP_2014,c.total_votes as BJP_2019 from 2014_result b
join 2019_result c on b.pc_name=c.pc_name and b.total_votes<c.total_votes
where b.party="BJP" and c.party="BJP")
select pc_name,BJP_2014,BJP_2019,round(((BJP_2019-BJP_2014)/(BJP_2014))*100,2) as
votes_gain
from cte order by votes_gain desc limit 5;
```

Output :

| pc_name | BJP_2014 | BJP_2019 | votes_gain |
|---|---|---|---|
| Tripura West | 54706 | 573532 | 948.39 |
| Tripura East | 60613 | 482126 | 695.42 |
| Mathurapur | 66538 | 522854 | 685.80 |
| Purulia | 86236 | 668107 | 674.74 |
| Ghatal | 94842 | 609986 | 543.16 |

Part b: Top 5 constituencies in terms of voter turnout 2014 to 2019 growth . for INC

SQL code:

```
-- for INC
with cte as (
Select b.pc_name,b.total_votes as INC_2014,c.total_votes as INC_2019 from 2014_result b
join 2019_result c on b.pc_name=c.pc_name and b.total_votes<c.total_votes
where b.party="INC" and c.party="INC")
select pc_name,INC_2014,INC_2019,round(((INC_2019-INC_2014)/(INC_2014))*100,2) as
votes_gain
from cte order by votes_gain desc limit 5;
```

```
319     -- for INC
320 •   with cte as (
321     Select b.pc_name,b.total_votes as INC_2014,c.total_votes as INC_2019 from 2014_result b
322     join 2019_result c on b.pc_name=c.pc_name and b.total_votes<c.total_votes
323     where b.party="INC" and c.party="INC")
324     select pc_name,INC_2014,INC_2019,round(((INC_2019-INC_2014)/(INC_2014))*100,2) as votes_gain
325     from cte order by votes_gain desc limit 5;
```

Output :

| | pc_name | INC_2014 | INC_2019 | votes_gain |
|---|---|---|---|---|
| ▶ | Karur | 30459 | 695697 | 2184.04 |
| | Arani | 27717 | 617760 | 2128.81 |
| | Thiruvallur | 43960 | 767292 | 1645.43 |
| | Krishnagiri | 38885 | 611298 | 1472.07 |
| | Virudhunagar | 38482 | 470883 | 1123.64 |

Q9: 9. List top 5 constituencies for two major national parties where they have lost vote share in 2019 as compared to 2014.

Part a: Top 5 constituencies in terms of voter turnout 2014 to 2019 lost . for BJP
SQL code:

```
with cte as (
Select b.pc_name,b.total_votes as BJP_2014,c.total_votes as BJP_2019 from 2014_result b
join 2019_result c on b.pc_name=c.pc_name and b.total_votes>c.total_votes
where b.party="BJP" and c.party="BJP")
select pc_name,BJP_2014,BJP_2019,round(((BJP_2014-BJP_2019)/(BJP_2014))*100,2) as
votes_gain
from cte order by votes_gain desc limit 5;
```

```
329     -- for BJP
330 •   with cte as (
331     Select b.pc_name,b.total_votes as BJP_2014,c.total_votes as BJP_2019 from 2014_result b
332     join 2019_result c on b.pc_name=c.pc_name and b.total_votes>c.total_votes
333     where b.party="BJP" and c.party="BJP")
334     select pc_name,BJP_2014,BJP_2019,round(((BJP_2014-BJP_2019)/(BJP_2014))*100,2) as votes_gain
335     from cte order by votes_gain desc limit 5;
```

Output :

| | pc_name | BJP_2014 | BJP_2019 | votes_loss |
|---|---|---|---|---|
| ▶ | Narsapuram | 540306 | 12414 | 97.70 |
| | Tirupati | 542951 | 16125 | 97.03 |
| | Visakhapatnam | 566832 | 33892 | 94.02 |
| | Bhongir | 183249 | 65457 | 64.28 |
| | Warangal | 187139 | 83777 | 55.23 |

Part b: Top 5 constituencies in terms of voter turnout 2014 to 2019 lost . for BJP
SQL code:

```
-- INC
with cte as (
Select b.pc_name,b.total_votes as INC_2014,c.total_votes as INC_2019 from 2014_result b
join 2019_result c on b.pc_name=c.pc_name and b.total_votes>c.total_votes
where b.party="INC" and c.party="INC")
```

select pc_name,INC_2014,INC_2019,round(((INC_2014-INC_2019)/(INC_2014))*100,2) as votes_gain
from cte order by votes_gain desc limit 5;

```
337     -- INC
338 •  with cte as (
339     Select b.pc_name,b.total_votes as INC_2014,c.total_votes as INC_2019 from 2014_result b
340     join 2019_result c on b.pc_name=c.pc_name and b.total_votes>c.total_votes
341     where b.party="INC" and c.party="INC")
342     select pc_name,INC_2014,INC_2019,round(((INC_2014-INC_2019)/(INC_2014))*100,2) as votes_gain
343     from cte order by votes_gain desc limit 5;
```

Output :

| | pc_name | INC_2014 | INC_2019 | votes_loss |
|---|---|---|---|---|
| ▶ | Vizianagaram | 122487 | 15725 | 87.16 |
| | Ratnagiri - sindhudurg | 343037 | 63299 | 81.55 |
| | Kolkata Uttar | 130783 | 26093 | 80.05 |
| | Rampur | 156466 | 35009 | 77.63 |
| | Alipurduars | 116718 | 27427 | 76.50 |

Q10:10.Which constituency has voted the most for NOTA?

Part a: SQL code:
Select pc_name, total_votes from 2014_result where party="NOTA" order by total_votes desc limit 1;

```
346     -- 2014
347 •  Select pc_name, total_votes from 2014_result where party="NOTA" order by total_votes desc limit 1;
```

Output :

| | pc_name | total_votes |
|---|---|---|
| ▶ | Nilgiris | 46559 |

Part b: SQL code:
Select pc_name, total_votes from 2019_result where party="NOTA" order by total_votes desc limit 1;

```
349 •  Select pc_name, total_votes from 2019_result where party="NOTA" order by total_votes desc limit 1;
```

Output :

| | pc_name | total_votes |
|---|---|---|
| ▶ | Gopalganj (SC) | 51660 |

:

Q11: Which constituencies have elected candidates whose party has less than 10% vote share at state level in 2019?

Part a: Top 5 states in terms of voter turnout 2014.

SQL code:

```
with cte_1 as (
SELECT
    2019_result.state,
    2019_result.party,
    ROUND(SUM(total_votes) / state_total_votes * 100, 2) AS voting_share_percentage
FROM
    2019_result
JOIN (
    SELECT
        state,
        SUM(total_votes) AS state_total_votes
    FROM
        2019_result
    GROUP BY
        state
) AS state_votes ON 2019_result.state = state_votes.state
GROUP BY
    state, party
having voting_share_percentage <10),
cte_2 as (
SELECT
    state,
    pc_name,
    party,
    total_votes
FROM
    (
        SELECT
            state,
            pc_name,
            party,
            total_votes,
            ROW_NUMBER() OVER (PARTITION BY pc_name ORDER BY total_votes DESC) AS
rnk
        FROM
            2019_result
    ) AS subquery
WHERE
    rnk = 1)
select c.pc_name from cte_1 b join cte_2 c on b.state=c.state and b.party=c.party
```

Output :

| pc_name |
| --- |
| Amravati |
| Anantnag |
| Baharampur |
| Baramulla |
| Chidambaram |

36 pcs

Q12: Is there a correlation between postal votes % and voter turnout %?

SQL code:

```
397 • with cte as (select state,sum(distinct total_electors) as electors,sum(postal_votes) as post
398   from 2014_result group by state)
399   select state,round((post/electors)*100,2) as postal_percentage,post
400   from cte order by post desc, postal_percentage desc ;
401
```

with cte as (select state,sum(distinct total_electors) as electors,sum(postal_votes) as post
from 2014_result group by state)
select state,round((post/electors)*100,2) as postal_percentage,post
from cte order by post desc, postal_percentage desc ;

Output :

| state | postal_percentage | post | electors |
| --- | --- | --- | --- |
| Telangana | 0.37 | 238710 | 64934138 |
| Gujarat | 0.31 | 123869 | 40603104 |
| Rajasthan | 0.19 | 82993 | 42994657 |
| West Bengal | 0.11 | 72018 | 62833113 |
| Tamil Nadu | 0.13 | 70747 | 55114867 |

Q13: Is there a correlation between postal votes % and voter turnout %?

Part a: Top 5 states in terms of voter turnout 2014.

SQL code:

Output :

Part b: Top 5 states in terms of voter turnout 2014.

SQL code:

Output :