LOK SABHA ELECTIONS 2024
ELECTION COMMISSION OF INDIA ANALYSIS

USING SQL QUERIES

Project Description

Indian General Elections 2024 Analysis

This project presents a comprehensive analysis of the 2024 Indian General Elections, focus the distribution of Lok Sabha seats, the performance of major political alliances, and a detailed breakdown of voting patterns across states and constituencies. The analysis is data-driver covering key aspects such as winning margins, vote share, and party-wise performance.

1. Overview of Lok Sabha Seats in India

The report begins by providing an overview of the total number of Lok Sabha seats available for contest across all states and Union territories in India.

2. Political Alliances and Seat Distribution

The two major alliances in the 2024 elections—NDA (National Democratic Alliance) and I.N.D.I.A. (Indian National Developmental Inclusive Alliance)—are analyzed in detail.

Total seats won by NDA and I.N.D.I.A. alliances
State-wise performance of these alliances.

Individual party contributions to each alliance's total seats.

3. Winning Candidates and Margins

Their party affiliation.

The margin by which they won against their closest competitor.
Specific state-wise results to observe regional voting trends.

4. Voting Pattern Analysis

This section examines the distribution of votes among candidates in each constituency.
It provides a comparison between EVM (Electronic Voting Machine)
votes and Postal votes to analyze differences in voting behavior.

5. State-wise Party Performance

The analysis identifies which party won the most seats in each state.
It also presents a breakdown of seat distribution among different parties
at the state level.

6. Party Alliance Vote Share

The report calculates the total number of votes received by each alliance (NDA, I.N.D.I.A., and Others).
This analysis helps in understanding overall voter preference and support trends.

7. Candidate Ranking by Votes

Winning candidates are ranked based on the total number of votes received.
The name of the second-ranking candidate in each constituency is also included for reference.

8. Constituency-wise Vote Data

The total number of votes cast in each constituency is recorded.
The vote share percentage of the winning candidate in each constituency is arranged in decreasing order to highlight landslide victories.
The candidate who received the highest number of votes in each constituency is also identified.

9. Voter Turnout and Participation Trends

The total number of voters in each state is listed in descending order to showcase regions with the highest electoral participation.

Total number of Loksabha Seats In India 2024

```sql
--Total Seats in Loksabha Election In India 2024
select sum(won) from parties;
```

	sum numeric 🔒
1	543

Total number of Loksabha seats corresponding to each state

```sql
select state,count(*) from states t1
join results t2
on t1.state_id=t2.state_id
group by state
order by count(*) desc;
```

state character varying (150)	count bigint
Uttar Pradesh	80
Maharashtra	48
West Bengal	42
Bihar	40
Tamil Nadu	39
Madhya Pradesh	29
Karnataka	28
Gujarat	26

Total number of Loksabha seats won by NDA Alliance

```sql
select sum(won) from parties
where party in('Bharatiya Janata Party - BJP'
,'Telugu Desam - TDP'
,'Janata Dal  (United) - JD(U)'
,'Shiv Sena - SHS'
,'AJSU Party - AJSUP'
,'Apna Dal (Soneylal) - ADAL'
,'Asom Gana Parishad - AGP'
,'Hindustani Awam Morcha (Secular) - HAMS'
,'Janasena Party - JnP'
,'Janata Dal  (Secular) - JD(S)'
,'Lok Janshakti Party(Ram Vilas) - LJPRV'
,'Nationalist Congress Party - NCP'
,'Rashtriya Lok Dal - RLD'
,'Sikkim Krantikari Morcha - SKM'
);
```

| | sum |
	numeric 🔒
1	292

Seats won by NDA Alliance Parties corresponding to each state

```sql
select state,count(*)from results t1
join states  t2
on t1.state_id=t2.state_id
join const_result t3
on t1.parliament_no=t3.parliament_const
join parties t4
on t3.party_id=t4.party_id
where party in ('Bharatiya Janata Party - BJP'
,'Telugu Desam - TDP'
,'Janata Dal  (United) - JD(U)'
,'Shiv Sena - SHS'
,'AJSU Party - AJSUP'
,'Apna Dal (Soneylal) - ADAL'
,'Asom Gana Parishad - AGP'
,'Hindustani Awam Morcha (Secular) - HAMS'
,'Janasena Party - JnP'
,'Janata Dal  (Secular) - JD(S)'
,'Lok Janshakti Party(Ram Vilas) - LJPRV'
,'Nationalist Congress Party - NCP'
,'Rashtriya Lok Dal - RLD'
,'Sikkim Krantikari Morcha - SKM')
group by state
order by count(*) desc;
```

1	Uttar Pradesh	36
2	Bihar	30
3	Madhya Pradesh	29
4	Gujarat	25
5	Andhra Pradesh	21
6	Odisha	20
7	Karnataka	19
8	Maharashtra	17
9	Rajasthan	14
10	West Bengal	12
11	Chhattisgarh	10
12	Assam	10
13	Jharkhand	9
14	Telangana	8
15	Delhi	7
16	Haryana	5
17	Uttarakhand	5
18	Himachal Pradesh	4
19	Jammu and Kashmir	2
20	Tripura	2

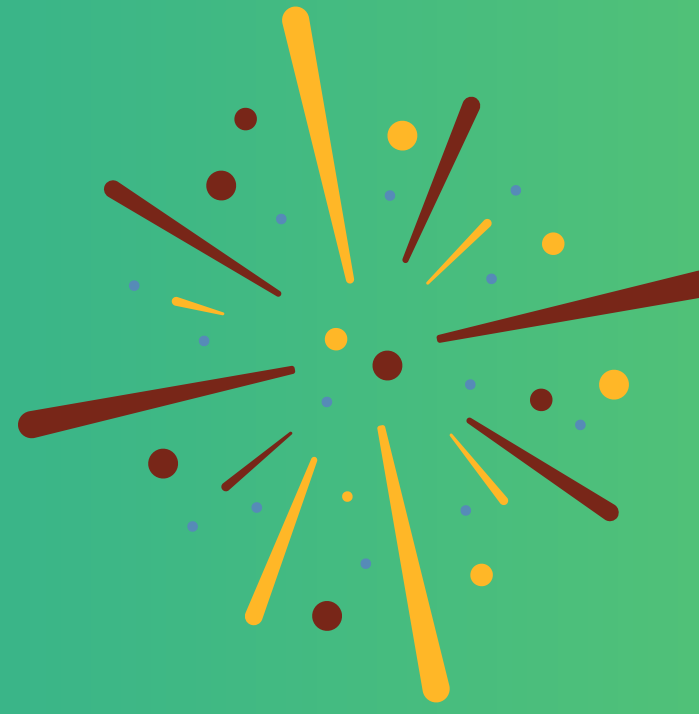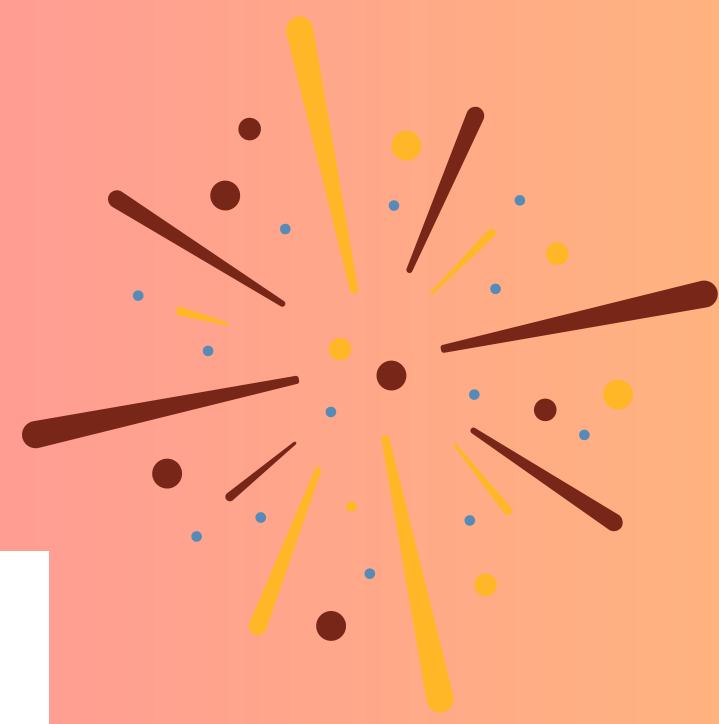# Total number of Loksabha Seats won by I.N.D.I.A. Alliance

```sql
select sum(won) from parties
where party in('Indian National Congress - INC',
'Aam Aadmi Party - AAAP',
'All India Trinamool Congress - AITC',
'Bharat Adivasi Party - BHRTADVSIP',
'Communist Party of India  (Marxist) - CPI(M)',
'Communist Party of India  (Marxist-Leninist)  (Liberation) - CPI(ML)(L)'
'Communist Party of India - CPI',
'Dravida Munnetra Kazhagam - DMK',
'Indian Union Muslim League - IUML',
'Jammu & Kashmir National Conference - JKN',
'Jharkhand Mukti Morcha - JMM',
'Jammu & Kashmir National Conference - JKN',
'Kerala Congress - KEC',
'Marumalarchi Dravida Munnetra Kazhagam - MDMK',
'Nationalist Congress Party Sharadchandra Pawar - NCPSP',
'Rashtriya Janata Dal - RJD',
'Rashtriya Loktantrik Party - RLTP',
'Revolutionary Socialist Party - RSP',
'Samajwadi Party - SP',
'Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT',
'Viduthalai Chiruthaigal Katchi - VCK'
);
```

numeric

234

Total number of loksabha Seats won by I.N.D.I.A. Alliance Parties corresponding to each state

```sql
select state,count(*)from results t1
join states  t2
on t1.state_id=t2.state_id
join const_result t3
on t1.parliament_no=t3.parliament_const
join parties t4
on t3.party_id=t4.party_id
where party in('Indian National Congress - INC',
'Aam Aadmi Party - AAAP',
'All India Trinamool Congress - AITC',
'Bharat Adivasi Party - BHRTADVSIP',
'Communist Party of India  (Marxist) - CPI(M)',
'Communist Party of India  (Marxist-Leninist)  (Liberation) - CPI(ML)(L)',
'Communist Party of India - CPI',
'Dravida Munnetra Kazhagam - DMK',
'Indian Union Muslim League - IUML',
'Jammu & Kashmir National Conference - JKN',
'Jharkhand Mukti Morcha - JMM',
'Jammu & Kashmir National Conference - JKN',
'Kerala Congress - KEC',
'Marumalarchi Dravida Munnetra Kazhagam - MDMK',
'Nationalist Congress Party Sharadchandra Pawar - NCPSP',
'Rashtriya Janata Dal - RJD',
'Rashtriya Loktantrik Party - RLTP',
'Revolutionary Socialist Party - RSP',
'Samajwadi Party - SP',
'Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT',
'Viduthalai Chiruthaigal Katchi - VCK')
group by state
order by count(*) desc;
```

Uttar Pradesh	43
Tamil Nadu	39
West Bengal	30
Maharashtra	30
Kerala	19
Rajasthan	11
Punjab	10
Bihar	9
Karnataka	9
Telangana	8
Jharkhand	5
Haryana	5
Assam	3
Jammu and Kashmir	2
Manipur	2
Chandigarh	1
Goa	1
Meghalaya	1
Puducherry	1
Gujarat	1
Chhattisgarh	1

We add a extra column in parties name it party_alliance_1,
Which party alliance won the most seats across all states
in descending order

```sql
select state,party_alliance_1,count(*) from results t1
join states t2
on t1.state_id=t2.state_id
join const_result t3
on t1.parliament_no=t3.parliament_const
join parties t4
on t3.party_id=t4.party_id
group by state,party_alliance_1
order by count(*) desc;
```

	state character varying (150)	party_alliance_1 character varying (70)	count bigint
1	Uttar Pradesh	I.N.D.I.A	43
2	Tamil Nadu	I.N.D.I.A	39
3	Uttar Pradesh	NDA	36
4	Bihar	NDA	30
5	Maharashtra	I.N.D.I.A	30
6	West Bengal	I.N.D.I.A	30
7	Madhya Pradesh	NDA	29
8	Gujarat	NDA	25
9	Andhra Pradesh	NDA	21
10	Odisha	NDA	20
11	Kerala	I.N.D.I.A	19
12	Karnataka	NDA	19

Winning candidate name,their party name,margin by which they won for a constituency and for specific state

```sql
select cr.winning_candidate,pr.party,cr.margin,
cr.const_name,st.state,cr.total_vote from
const_result cr
join parties pr
on pr.party_id=cr.party_id
join results rs
on cr.parliament_const=rs.parliament_no
join states st
on rs.state_id=st.state_id
where st.state='Uttar Pradesh'
order by cr.margin;
```

winning_candidate character varying (100)	party character varying (100)	margin bigint	const_name character varying (100)	state character varying (150)	total_vote bigint
AJENDRA SINGH LODHI	Samajwadi Party - SP	2629	HAMIRPUR	Uttar Pradesh	490683
MUKESH RAJPUT	Bharatiya Janata Party - BJP	2678	FARRUKHABAD	Uttar Pradesh	487963
KAMLESH PASWAN	Bharatiya Janata Party - BJP	3150	BANSGAON	Uttar Pradesh	428693
RAMASHANKAR RAJBHAR	Samajwadi Party - SP	3573	SALEMPUR	Uttar Pradesh	405472
PRAVEEN PATEL	Bharatiya Janata Party - BJP	4332	PHULPUR	Uttar Pradesh	452600
ANAND BHADAURIYA	Samajwadi Party - SP	4449	DHAURAHRA	Uttar Pradesh	443743
ARUN GOVIL	Bharatiya Janata Party - BJP	10585	MEERUT	Uttar Pradesh	546469
SATISH KUMAR GAUTAM	Bharatiya Janata Party - BJP	15647	ALIGARH	Uttar Pradesh	501834
NEERAJ MAURYA	Samajwadi Party - SP	15969	AONLA	Uttar Pradesh	492515
RAMESH AWASTHI	Bharatiya Janata Party - BJP	20968	KANPUR	Uttar Pradesh	443055
BIRENDRA SINGH	Samajwadi Party - SP	21565	CHANDAULI	Uttar Pradesh	474476

What is the distribution of evm votes versus postal votes for a candidates with different parties in specific constituency

```sql
select cs.evm_votes,cs.postal_votes,
cs.candidate from const_result cr
join const cs
on cr.const_id=cs.consitituency_id
where cr.const_name='BARABANKI'
order by evm_votes desc
```

	evm_votes bigint	postal_votes bigint	candidate character varying (100)
1	718528	1399	TANUJ PUNIA
2	503452	771	RAJRANI RAWAT
3	39105	72	SHIV KUMAR DOHAREY
4	8220	1	NOTA
5	3669	0	BABOORAM
6	2927	1	RAMLAKHAN PASI
7	2320	1	MITHALESH KUMARI
8	2172	1	DEVATADEEN GAUTAM
9	2018	2	ASHA DEVI
10	1493	0	PROF. (DR.) RAM GHULAM RAZDAN
11	1189	1	MAHENDRA KUMAR RAWAT
12	1137	1	OMKAR
13	1076	2	ADVOCATE SANTOSH RAWAT
14	1075	1	PREMCHANDRA HARIJAN

Which party won most seats in a particular state and how many seats did each party win

```sql
select pr.party,count(*) as total_seats from  const_result cr
join parties pr
on pr.party_id=cr.party_id
join results rs
on cr.parliament_const=rs.parliament_no
join states st
on rs.state_id=st.state_id
where st.state='Uttar Pradesh'
group by pr.party
order by total_seats desc;
```

	party character varying (100) 🔒	total_seats 🔒 bigint
1	Samajwadi Party - SP	37
2	Bharatiya Janata Party - BJP	33
3	Indian National Congress - INC	6
4	Rashtriya Lok Dal - RLD	2
5	Aazad Samaj Party (Kanshi Ram) - ASPKR	1
6	Apna Dal (Soneylal) - ADAL	1

Total no of seats won by each
party_alliance(I.N.D.I.A.,NDA,Other) in each state

```sql
select st.state,
sum( case when pr.party_alliance_1='NDA' THEN 1 else 0 end)as nda_seats_won,
sum( case when pr.party_alliance_1='I.N.D.I.A' THEN 1 else 0 end)as india_seats_won,
sum( case when pr.party_alliance_1='OTHER' THEN 1 else 0 end)as other_seats_won
from  const_result cr
join parties pr
on pr.party_id=cr.party_id
join results rs
on cr.parliament_const=rs.parliament_no
join states st
on rs.state_id=st.state_id
group by st.state
order by nda_seats_won desc;
```

	state character varying (150)	nda_seats_won bigint	india_seats_won bigint	other_seats_won bigint
1	Uttar Pradesh	36	43	1
2	Bihar	30	9	1
3	Madhya Pradesh	29	0	0
4	Gujarat	25	1	0
5	Andhra Pradesh	21	0	4
6	Odisha	20	1	0
7	Karnataka	19	9	0
8	Maharashtra	17	30	1
9	Rajasthan	14	11	0

Vote count comparison corresponding to each party alliance (I.N.D.I.A. , NDA and Other)

```sql
select pr.party_alliance_1,sum(cr.total_vote) as avg_vote_by_each_alliance from parties pr
join const_result cr
on pr.party_id=cr.party_id
group by pr.party_alliance_1
order by avg_vote_by_each_alliance desc
```

	party_alliance_1 character varying (70) 🔒	avg_vote_by_each_alliance numeric 🔒
1	NDA	189074816
2	I.N.D.I.A	129724029
3	OTHER	7600913

Rank of each winning candidate based on their no of total vote count for each party

```sql
select cr.winning_candidate,cr.margin,cr.parliament_const
,cr.total_vote,pr.party,rank() over(partition by pr.party order by total_vote desc)
from const_result cr
join parties pr
on cr.party_id=pr.party_id;
```

	winning_candidate character varying (100)	margin bigint	parliament_const character varying (100)	total_vote bigint	party character varying (100)	rank bigint
1	GURMEET SINGH MEET HAYER	172560	SANGRUR(12)	364085	Aam Aadmi Party - AAAP	1
2	MALVINDER SINGH KANG	10846	ANANDPURSAHIB(6)	313217	Aam Aadmi Party - AAAP	2
3	DR. RAJ KUMAR CHABBEWAL	44111	HOSHIARPUR(5)	303859	Aam Aadmi Party - AAAP	3
4	CHANDRASHEKHAR	151473	NAGINA(5)	512552	Aazad Samaj Party (Kanshi Ram) - ASPKR	1
5	CHANDRA PRAKASH CHOUDHARY	80880	GIRIDIH(6)	451139	AJSU Party - AJSUP	1
6	ASADUDDIN OWAISI	338087	HYDERABAD(9)	661981	All India Majlis-E-Ittehadul Muslimeen - AIMIM	1
7	ABHISHEK BANERJEE	710930	DIAMONDHARBOUR(21)	1048230	All India Trinamool Congress - AITC	1
8	PRATIMA MONDAL	470219	JOYNAGAR(19)	894312	All India Trinamool Congress - AITC	2
9	ASIT KUMAR MAL	327253	BOLPUR(41)	855633	All India Trinamool Congress - AITC	3
10	ADHIKARI DEEPAK (DEV)	182868	GHATAL(32)	837990	All India Trinamool Congress - AITC	4

Name of winnig candidate, corresponding to him name of 2nd candidate (their party name) who rank 2nd in a constituency

```sql
select * from(select ct.candidate,ct.party,cr.const_name,cr.winning_candidate,nth_value(candidate,2)
over (partition by cr.const_name order by ct.total_votes desc
rows between unbounded preceding and unbounded following) as second_winning_candidate from const ct
join const_result cr
on ct.consitituency_id=cr.const_id)t
where t.candidate=t.second_winning_candidate;
```

	party character varying (100)	const_name character varying (100)	winning_candidate character varying (100)	second_winning_candidate character varying
1	Indian National Congress	ADILABAD	GODAM NAGESH	ATHRAM SUGUNA
2	Samajwadi Party	AGRA	PROF S P SINGH BAGHEL	SURESH CHAND KARDAM
3	Indian National Congress	AHMEDABADEAST	HASMUKHBHAI PATEL (H.S.PATEL)	HIMMATSINH PRAHLADSINH PATEL
4	Indian National Congress	AHMEDABADWEST	DINESHBHAI MAKWANA (ADVOCATE)	BHARAT YOGENDRA MAKWANA
5	Bharatiya Janata Party	AHMEDNAGAR	NILESH DNYANDEV LANKE	DR. SUJAY RADHAKRISHNA VIKHEPATIL
6	Indian National Congress	AJMER	BHAGIRATH CHOUDHARY	RAMCHANDRA CHOUDHARY
7	Samajwadi Party	AKBARPUR	DEVENDRA SINGH ALIAS BHOLE SINGH	RAJARAM PAL
8	Indian National Congress	AKOLA	ANUP SANJAY DHOTRE	ABHAY KASHINATH PATIL
9	Communist Party of India (Marxist)	ALAPPUZHA	K. C VENUGOPAL	A. M ARIFF

Total no of vote count in each constituency in descending order

```sql
select t1.parliament_const,sum(t2.total_votes) as
total_no_of_votes_in_constituency from const_result t1
join const t2
on t1.const_id=t2.consitituency_id
group by t1.parliament_const
order by total_no_of_votes_in_constituency desc
```

	parliament_const character varying (100)	total_no_of_votes_in_constituency numeric
1	DHUBRI(2)	2453608
2	MALKAJGIRI(7)	1933843
3	BANGALORERURAL(23)	1919540
4	DARRANG-UDALGURI(4)	1811200
5	BANGALORENORTH(24)	1752504
6	BARMER(17)	1688051
7	BARPETA(3)	1685943
8	CHEVELLA(10)	1675354
9	BANSWARA(20)	1636852

Number of total vote count for party alliance in each state in decreasing order

```sql
select pr.party_alliance_1,st.state, sum(cs.total_votes) as total_vote_share
from parties pr
join const_result cr
on pr.party_id=cr.party_id
join results rs
on cr.parliament_const=rs.parliament_no
join states st
on st.state_id=rs.state_id
join const cs
on cr.const_id=cs.consitituency_id
group by st.state,pr.party_alliance_1
order by total_vote_share desc
```

	party_alliance_1 character varying (70)	state character varying (150)	total_vote_share numeric
1	I.N.D.I.A	Uttar Pradesh	46998211
2	I.N.D.I.A	Tamil Nadu	43674048
3	I.N.D.I.A	West Bengal	43043183
4	NDA	Uttar Pradesh	39912128
5	NDA	Madhya Pradesh	37940251
6	I.N.D.I.A	Maharashtra	36206463
7	NDA	Bihar	32530098
8	NDA	Andhra Pradesh	28527413
9	NDA	Gujarat	27739696

Total no of voters in each state in descending order

```sql
select sum(cs.total_votes) as total_votes,st.state
from parties pr
join const_result cr
on pr.party_id=cr.party_id
join results rs
on cr.parliament_const=rs.parliament_no
join states st
on st.state_id=rs.state_id
join const cs
on cr.const_id=cs.consitituency_id
group by st.state
order by total_votes desc;
```

	total_votes numeric	state character varying (150)
1	87911642	Uttar Pradesh
2	60483687	West Bengal
3	57179133	Maharashtra
4	43674048	Tamil Nadu
5	43448949	Bihar
6	38793617	Karnataka
7	37940251	Madhya Pradesh
8	33729342	Andhra Pradesh
9	33164877	Rajasthan

Winning candidate based on percentage of votes in each constituency in decreasing order

```sql
select * from(select cs.candidate,cs.party,cs.percent_of_votes,cr.parliament_const,
first_value(cs.candidate) over(partition by cr.const_name order by cs.percent_of_votes desc)
as winning_candidate_name
from const cs
join const_result cr
on cs.consitituency_id=cr.const_id
join results rs
on cr.parliament_const=rs.parliament_no)t
where t.candidate=t.winning_candidate_name
order by percent_of_votes desc
```

party character varying (100)	percent_of_votes double precision	parliament_const character varying (100)	winning_candidate_name character varying
Bharatiya Janata Party	78.54	INDORE(26)	SHANKAR LALWANI
Bharatiya Janata Party	77.05	NAVSARI(25)	C R PATIL
Bharatiya Janata Party	76.7	VIDISHA(18)	SHIVRAJ SINGH CHOUHAN
Bharatiya Janata Party	76.48	GANDHINAGAR(6)	AMIT SHAH
Bharatiya Janata Party	72.85	TRIPURAWEST(1)	BIPLAB KUMAR DEB
Bharatiya Janata Party	72.04	VADODARA(20)	DR. HEMANG JOSHI
Bharatiya Janata Party	70.22	PANCHMAHAL(18)	RAJPALSINH MAHENDRASINH JADAV
Bharatiya Janata Party	68.54	TRIPURAEAST(2)	KRITI DEVI DEBBARMAN
Bharatiya Janata Party	68.49	SAGAR(5)	DR. LATA WANKHEDE

Candidate who received highest number of evm_votes in each constituency in decreasing order

```sql
SELECT
cr.const_name,cd.consitituency_id,cd.candidate,cd.evm_votes
FROM   const cd
JOIN const_result cr ON cd.consitituency_id = cr.const_id
WHERE
    cd.evm_votes = (
        SELECT MAX(cd1.evm_votes)
        FROM const cd1
        WHERE cd1.consitituency_id= cd.consitituency_id
    )
ORDER BY
    cd.evm_votes DESC;
```

	const_name character varying (100)	consitituency_id character varying (10)	candidate character varying (100)	evm_votes bigint
1	DHUBRI	S032	RAKIBUL HUSSAIN	1468549
2	INDORE	S1226	SHANKAR LALWANI	1223746
3	VIDISHA	S1218	SHIVRAJ SINGH CHOUHAN	1111556
4	BANGALORERURAL	S1023	DR C N MANJUNATH	1075553
5	RAIPUR	S268	BRIJMOHAN AGRAWAL	1047447
6	DIAMONDHARBOUR	S2521	ABHISHEK BANERJEE	1043493
7	NAVSARI	S0625	C R PATIL	1023366
8	GANDHINAGAR	S066	AMIT SHAH	999984
9	BANGALORENORTH	S1024	SHOBHA KARANDLAJE	982805

Conclusion

This project provides an in-depth exploratory data analysis (EDA) of the 2024 Lok Sabha elections with SQL, offering valuable insights into seat distribution, voter behavior, and party performance. By breaking down the results at national, state, and constituency levels, the report serves as a comprehensive reference for understanding electoral trends in India.

THANK YOU

AYUSH PATEL