

2024 - Lok Sabha election Results Data Analysis

KALVIUM DATA ANALYST TASK

*By REDDY NEERAJ.R
RA2111003010524*

SRM Institute Of Science and Technology

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Introduction

The 2024 Lok Sabha elections stand as a pivotal event in India's democratic landscape, marked by significant voter engagement and electoral dynamics across 543 parliamentary constituencies. With a total of 97.76 crore eligible electors, the electorate witnessed robust participation, culminating in the polling of 64.53 crore votes. This report aims to delve into the comprehensive analysis of these elections, exploring voter turnout trends, regional disparities, and electoral outcomes that shape the political landscape of the nation. By examining these data points, we seek to uncover insights into voter behavior, demographic patterns, and the democratic process that underpins India's parliamentary democracy. Through rigorous data analysis and visualization, this report endeavors to provide a nuanced understanding of the 2024 Lok Sabha elections, offering valuable perspectives on the electoral dynamics and implications for governance in the coming years.

DATA (used)

Party	Won	Vote_share
Bharatiya Janata Party - BJP	240	36.9
Indian National Congress - INC	99	21.4
Samajwadi Party - SP	37	4.6
All India Trinamool Congress - AITC	29	4.4
Dravida Munnetra Kazhagam - DMK	22	1.8
Telugu Desam - TDP	16	2
Janata Dal (United) - JD(U)	12	1.3
Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT	9	1.5
Nationalist Congress Party – Sharadchandra Pawar - NCPSP	8	0.9
Shiv Sena - SHS	7	1.2
Lok Janshakti Party(Ram Vilas) - LJPRV	5	0.4
Yuvajana Sramika Rythu Congress Party - YSRCP	4	2.1
Rashtriya Janata Dal - RJD	4	1.6
Communist Party of India (Marxist) - CPI(M)	4	1.8
Indian Union Muslim League - IUML	3	0.3
Aam Aadmi Party - AAP	3	1.1
Jharkhand Mukti Morcha - JMM	3	0.4
Janasena Party - JnP	2	0.2
Communist Party of India (Marxist-Leninist) (Liberation) - CPI(ML)(L)	2	0.3
Janata Dal (Secular) - JD(S)	2	0.3
Viduthalai Chiruthaigal Katchi - VCK	2	0.2
Communist Party of India - CPI	2	0.5

Rashtriya Lok Dal - RLD	2	0.1
Jammu & Kashmir National Conference - JKN	2	0.2
United People's Party, Liberal - UPPL	1	0.1
Asom Gana Parishad - AGP	1	0.2
Hindustani Awam Morcha (Secular) - HAMS	1	0.1
Kerala Congress - KEC	1	0.1
Revolutionary Socialist Party - RSP	1	0.1
Nationalist Congress Party - NCP	1	0.3
Voice of the People Party - VOTPP	1	0.1
Zoram People's Movement - ZPM	1	0
Shiromani Akali Dal - SAD	1	0.3
Rashtriya Loktantrik Party - RLTP	1	0.1
Bharat Adivasi Party - BHRTADVSI	1	0.2
Sikkim Krantikari Morcha - SKM	1	0
Marumalarchi Dravida Munnetra Kazhagam - MDMK	1	0.1
Aazad Samaj Party (Kanshi Ram) - ASPKR	1	0.1
Apna Dal (Soneylal) - ADAL	1	0.1
AJSU Party - AJSUP	1	0.1
All India Majlis-E-Ittehadul Muslimeen - AIMIM	1	0.2
Independent - IND	7	7.3
Total	543	100 (mentioned: 95)

Electors: 97,76,57,252

Votes Polled: 64,53,63,445

Turnout: 66.0%

Parliamentary Constituencies: 543

Analysis

Based on the data from the 2024 Lok Sabha elections, here are 10 insights derived from the analysis of party, vote share and seats won:

1. BJP Performance:

Vote Share Decline:

- Despite securing 240 seats, BJP's vote share decreased to 36.9% compared to previous elections, indicating a shift in voter preferences and political dynamics.

Seat Efficiency:

- The BJP efficiently converted its vote share into parliamentary seats, demonstrating strategic strength in key constituencies and leveraging alliances for electoral success.

Increased Coalition Dependency:

- Unlike previous elections, BJP relied more on alliances and coalition partners to achieve its seat tally, reflecting the need to navigate diverse regional and political landscapes.

Proportion of seats and Vote_share won by each party:

	Party	Proportion
0	Bharatiya Janata Party - BJP	0.441989
1	Indian National Congress - INC	0.182320
2	Samajwadi Party - SP	0.068140
3	All India Trinamool Congress - AITC	0.053407
4	Dravida Munnetra Kazhagam - DMK	0.040516
5	Telugu Desam - TDP	0.029466
6	Janata Dal (United) - JD(U)	0.022099
7	Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT	0.016575
8	Nationalist Congress Party - Sharadchandra Paw...	0.014733
9	Shiv Sena - SHS	0.012891
10	Lok Janshakti Party(Ram Vilas) - LJPRV	0.009208
11	Yuva Jana Sramika Rythu Congress Party - YSRCP	0.007366

Bjp formed Government with help of TDP and JD , to cross the Magic Number

Regional Variability:

- Strongholds in certain regions contrasted with challenges in others, highlighting the heterogeneous nature of voter preferences and regional dynamics across India.

Strategic Adaptations:

- BJP's adaptive campaign strategies and coalition formations underscore its responsiveness to evolving political scenarios and voter expectations, ensuring continued electoral dominance.

2. Vote Distribution:

- The 2024 Lok Sabha elections exhibited significant variability in vote shares among parties, reflecting diverse political preferences among voters. Major parties like the BJP and Congress showed varying performance across different regions, influenced by regional dynamics and strategic alliances. Regional parties played a crucial role in shaping electoral outcomes, leveraging local issues and identities to secure support. Urban and rural voting patterns differed based on socio-economic factors and governance issues. Smaller parties and independents impacted specific constituencies, underscoring the fragmented nature of India's political landscape. Changes in voter allegiances and strategic voting patterns highlighted dynamic shifts in political perceptions and support. Effective media campaigns and regional turnout variations further influenced vote distribution, emphasizing the complex interplay of factors shaping electoral outcomes in India.

3. Seat-Vote Disparity:

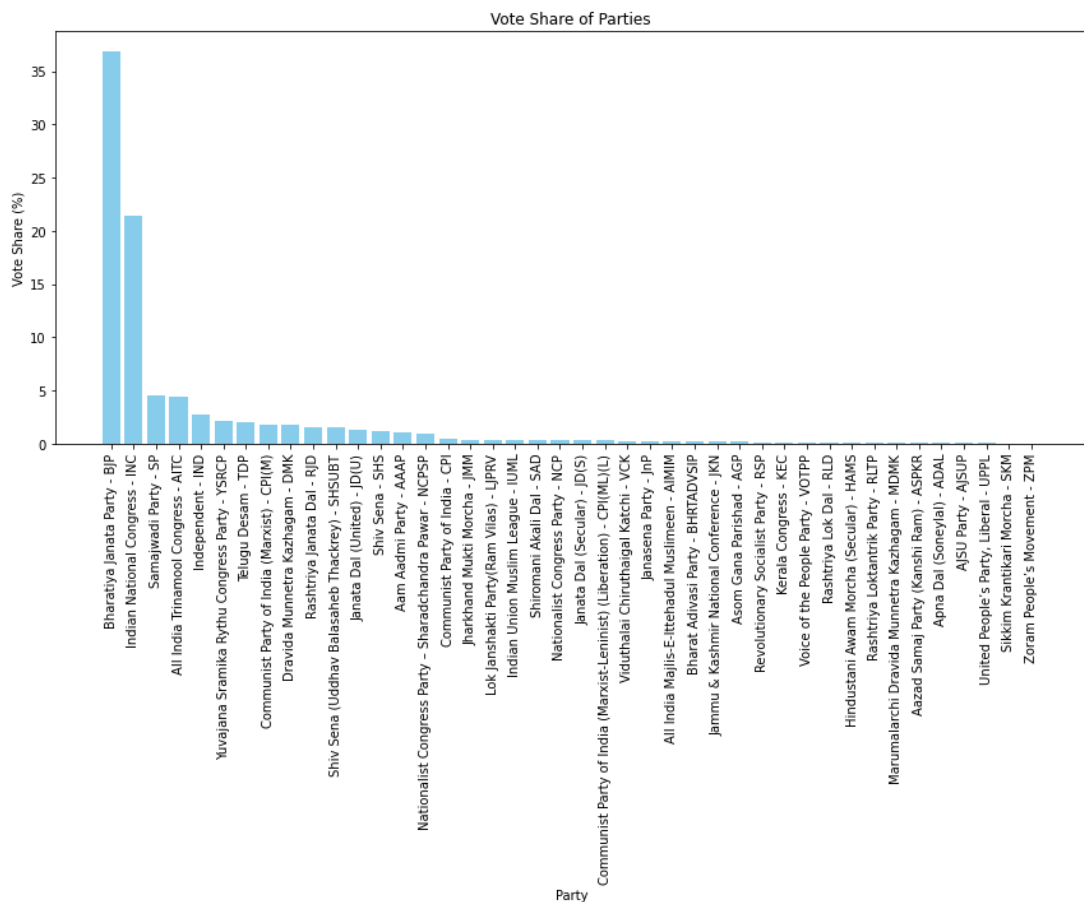
Despite parties securing high vote shares in the 2024 Lok Sabha elections, challenges in converting these into parliamentary seats were evident. This disparity often stems from the first-past-the-post electoral system, where candidates winning the most votes in individual constituencies secure

seats. Regional concentration of support can limit parties' ability to achieve proportional representation nationally. Strategic vote distribution, electoral geography, and the impact of multi-cornered contests further influence seat outcomes. Smaller parties and independents also play a role, affecting seat-vote relationships and overall parliamentary representation. These dynamics underscore the complexity of translating voter support into effective representation in India's electoral landscape.

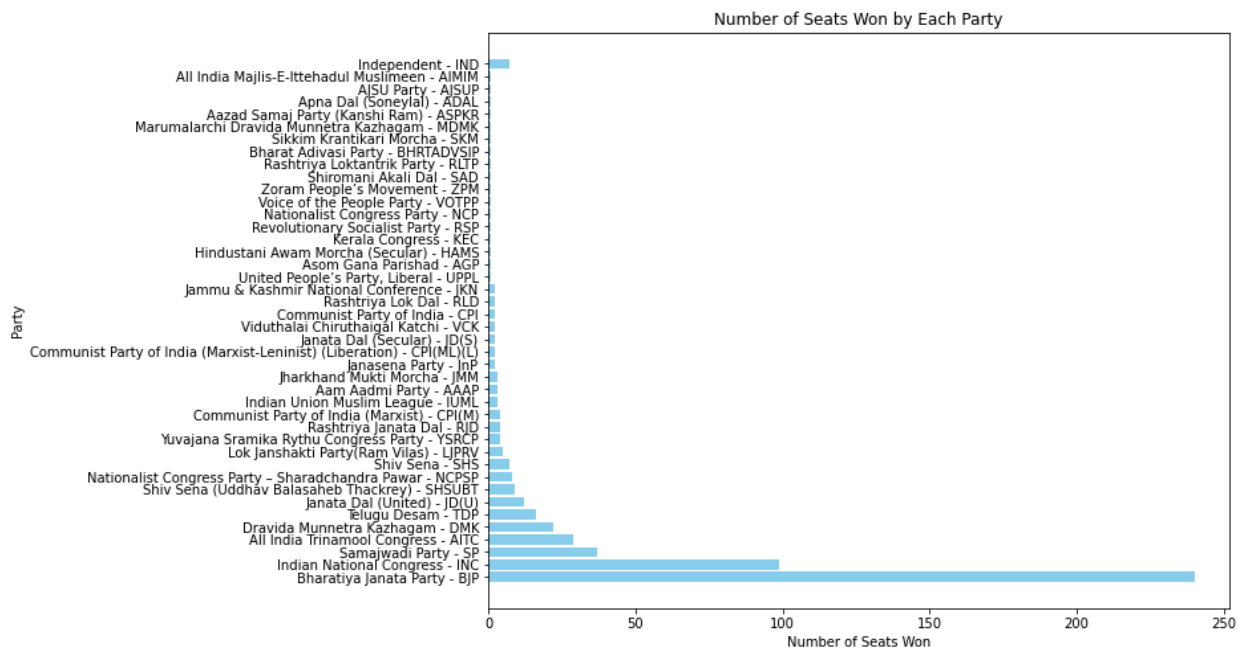
Like in the below Graph 1 and 2:

Although INC got 21.4% and won only 99 seats. **Ratio(seats/votes): 4.62621**

But, Samajwadi Party - SP got 4.6% and won 37 Seats. **Ratio(seats/votes): 8.0434**



1 and 2



4. Regional Variations:

The 2024 Lok Sabha elections revealed significant regional variations in vote shares and seat distributions, highlighting the diverse political dynamics across India. Localized issues, cultural identities, and economic conditions heavily influenced voter preferences. Regional parties like the DMK in Tamil Nadu and TMC in West Bengal dominated their respective states, while national parties varied in their performance across different regions.

Charismatic regional leaders and tailored election campaigns played crucial roles in swaying voter support. Historical voting patterns and emerging trends such as urbanization and social media also impacted regional vote shares. Understanding these variations is essential for formulating effective policies and governance strategies that address the specific needs of different regions.

5. Third-Party Impact:

Smaller parties and regional players had a significant impact on the 2024 Lok Sabha elections. These parties secured notable vote shares and

achieved localized seat victories by addressing specific regional issues and establishing strong local connections. Their presence fragmented votes, affecting the outcomes for major parties and often playing kingmaker roles in coalition governments.

Even with fewer seats, third parties influenced policy discussions and brought regional concerns to the national stage. Their dominance in certain states, effective voter mobilization, and ability to balance power in closely contested elections underscored their importance. The success of third parties reflects the diverse electorate in India and highlights the importance of regional dynamics in shaping the country's political landscape.

6. **Turnout Effects:**

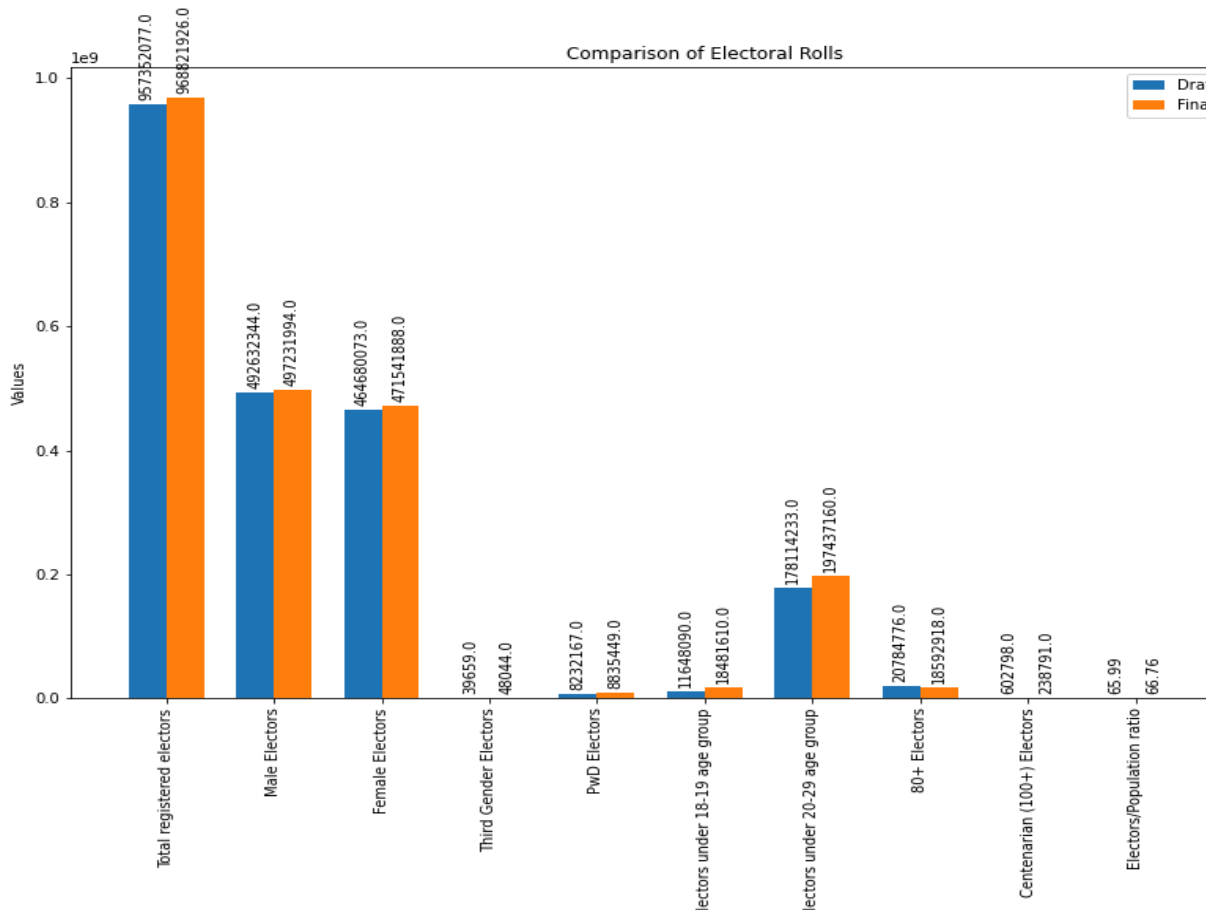
Voter turnout in the 2024 Lok Sabha elections significantly influenced party performance. Higher turnout rates signaled increased public engagement and favored parties with effective mobilization strategies, enhancing their electoral prospects. Turnout varied across demographics and regions, impacting electoral dynamics and coalition formations. Parties adapted campaign tactics to resonate with voter priorities and leverage voter education efforts. Understanding turnout dynamics remains crucial for enhancing democratic participation and shaping electoral outcomes effectively.

7. **Demographic Insights:**

Demographic breakdowns provide insights into voting patterns among different age groups, genders, and socio-economic backgrounds, shaping electoral outcomes and policy implications.

Parameters	Draft Electoral roll	Final Electoral Roll (as on 08.02.2024)
Total registered electors	95,73,52,077	96,88,21,926
Male Electors	49,26,32,344	49,72,31,994

Female Electors	46,46,80,073	47,15,41,888
Third Gender Electors	39,659	48,044
PwD Electors	82,32,167	88,35,449
Electors under 18-19 age group	1,16,48,090	1,84,81,610
Electors under 20-29 age group	17,81,14,233	19,74,37,160
80+ Electors	2,07,84,776	1,85,92,918
Centenarian (100+) Electors	6,02,798	2,38,791
Electors/Population ratio	65.99	66.76
Gender Ratio	943	948



As Visible in the above graph, increase in young voters and decline in senior voters has impacted the results

8. Turnout Effects:

Voter turnout in the 2024 Lok Sabha elections significantly influenced party performance. Higher turnout rates signaled increased public engagement and favored parties with effective mobilization strategies, enhancing their electoral prospects. Turnout varied across demographics and regions, impacting electoral dynamics and coalition formations. Parties adapted campaign tactics to resonate with voter priorities and leverage voter education efforts. Understanding turnout dynamics remains crucial for enhancing democratic participation and shaping electoral outcomes effectively.

9. In Andhra Pradesh:

Party	MLAs	MPs	Vote_share
Telugu Desam - TDP	135	16	38.3
YuvaJana Sramika Rythu Congress Party - YSRCP	11	4	40
Janasena Party - JnP	21	2	4.4
Bharatiya Janata Party - BJP	8	3	11.4
Total	175	25	100(Mentioned: 94.1)

Loss of YuvaJana Sramika Rythu Congress Party - YSRCP:

- Due to many Lies speculated from the opposition and change in the voter turnout from youth and urban areas made the ysrcp vote bank weak. And Still ysrcp stands as the single largest party in the state.
- The alliance formed by TDP-JNP-BJP made it difficult to counter the attacks of the opposition.

Dominance of Telugu Desam (TDP):

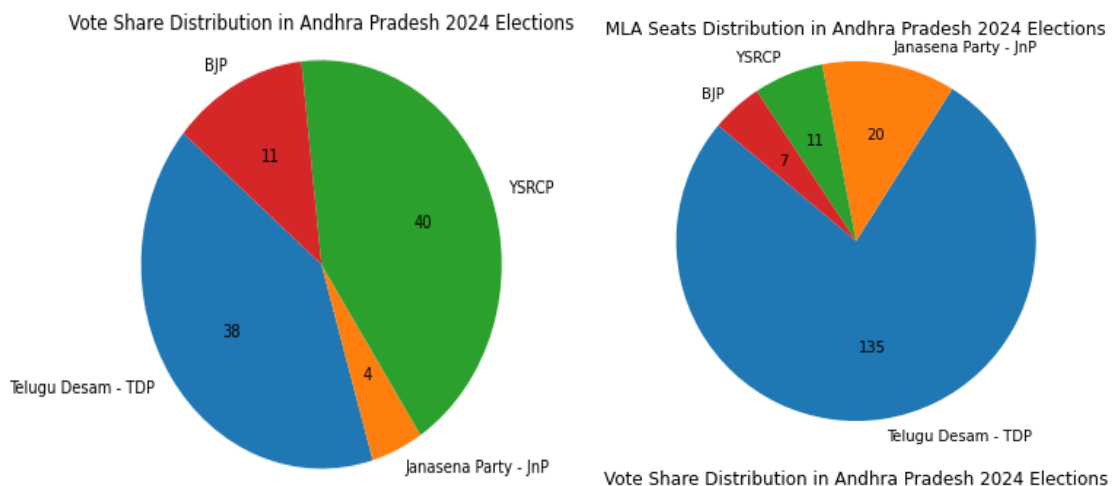
- Telugu Desam Party (TDP) emerged as the dominant force in Andhra Pradesh with a significant lead in MLA seats, securing 135 out of the total seats contested. This highlights TDP's strong regional presence and voter support across the state.

Emergence of Janasena Party (JnP) as a Contender:

- Janasena Party (JnP), led by its charismatic leader, gained prominence by securing 21 MLA seats. Despite being relatively new compared to other established parties, JnP's performance underscores its growing influence and appeal among voters in Andhra Pradesh.

Bharatiya Janata Party's (BJP) Strategic Gains:

- The Bharatiya Janata Party (BJP) made strategic gains in Andhra Pradesh, winning 8 MLA seats and 3 MP seats. This indicates BJP's efforts to expand its footprint in the state, leveraging alliances and focusing on key constituencies to strengthen its electoral presence.



10. In Odisha:

Party	MLAs	MPs	Vote share
Bharatiya Janata Party - BJP	78	20	40.07
Biju Janata Dal - BJD	51	0	40.22
Indian National Congress - INC	14	1	13.26
Communist Party of India (Marxist) - CPI(M)	1	0	0.37
Independent - IND	3	0	4
Total	147	21	100 (Mentioned:97.2)

Dominance of Biju Janata Dal (BJD):

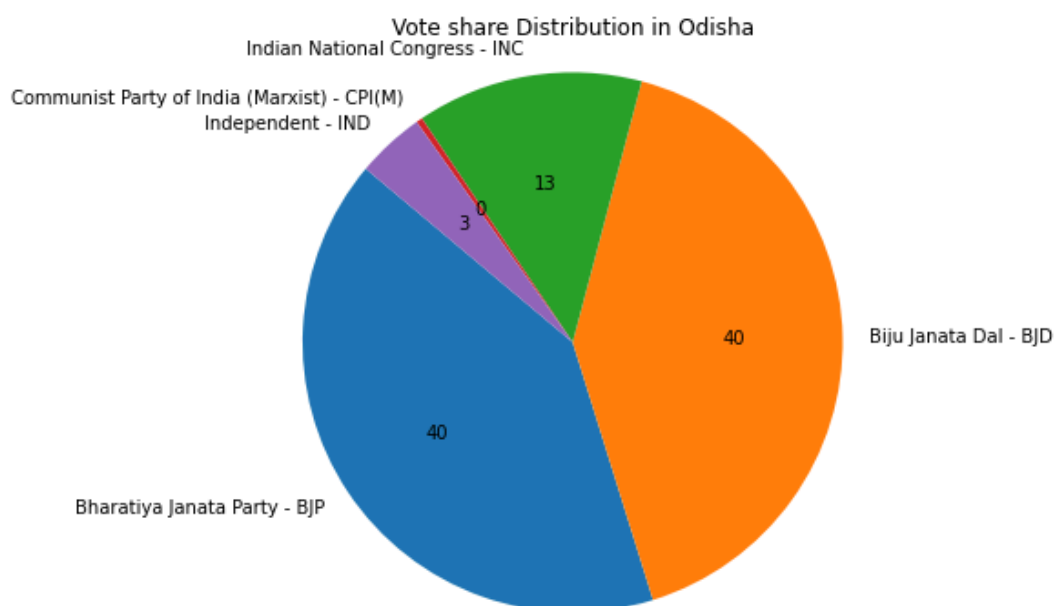
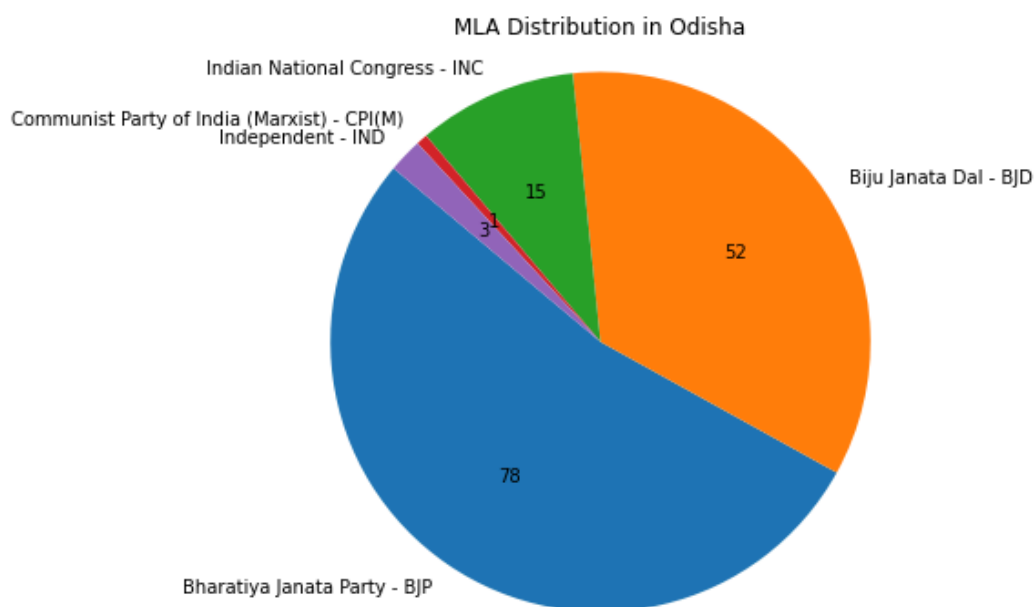
- Biju Janata Dal emerged as the dominant political force in Odisha, securing 51 MLA seats out of the total 147 seats contested. This indicates BJD's strong electoral performance and continued popularity among voters in the state.

Bharatiya Janata Party's (BJP) Significant Presence:

- BJP emerged as the second-largest party in Odisha with 78 MLA seats. The party's substantial seat count reflects its strategic gains and efforts to expand its political influence in the state, positioning itself as a major contender.

Limited Representation of Other Parties:

- Indian National Congress (INC) secured 14 MLA seats, indicating a moderate presence but highlighting challenges in gaining broader electoral traction. Smaller parties like the Communist Party of India (Marxist) (CPI(M)) and Independent candidates collectively secured a minimal number of seats, reflecting the competitive electoral landscape dominated by larger parties.



Conclusion:

In the 2024 elections, both at the Lok Sabha and state levels in Andhra Pradesh (AP) and Odisha, key trends and outcomes emerged. Regional parties such as the Biju Janata Dal (BJD) and Telugu Desam Party (TDP) demonstrated significant strength by securing substantial MLA seats, underscoring their local appeal and strategic electoral maneuvers. Meanwhile, national parties like the Bharatiya Janata Party (BJP) and Indian National Congress (INC) navigated complex political landscapes, balancing national agendas with regional dynamics to varying degrees of success. Voter turnout played a pivotal role, influencing electoral outcomes and reflecting voter engagement across states. The rise of parties like Janasena Party in AP and BJP's strategic gains in Odisha highlighted shifting political preferences and evolving voter sentiments. These elections underscored the importance of localized strategies, strong regional leadership, and effective mobilization efforts in shaping electoral mandates. The outcomes will likely impact governance priorities, with parties poised to address regional issues and implement policies aligned with local aspirations. Overall, the elections demonstrated the diverse and dynamic nature of Indian democracy, showcasing the interplay between national trends and localized political realities in shaping electoral results and future governance strategies.

Reference:

- <https://results.eci.gov.in/>
- <https://www.indiavotes.com/>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=2005189>

Tools:

- *Jupyter Notebook*
- *Python (pandas, Matplotlib)*

```
In [53]: import pandas as pd
# Load the data
file_path = r'C:\Users\neeraj\Downloads\party_seats (2).xlsx'
df = pd.read_excel(file_path)

# Display the first few rows of the data
print("First few rows of the data:")
print(df.head())

# Basic summary statistics
print("\nBasic summary statistics:")
print(df.describe())

# Total number of seats
total_seats = df['Won'].sum()
print(f"\nTotal number of seats: {total_seats}")

# Proportion of seats won by each party
df['Proportion'] = df['Won'] / total_seats
print("\nProportion of seats and Vote_share won by each party:")
print(df[['Party', 'Proportion']])

# Party with the maximum seats
max_seats_party = df[df['Won'] == df['Won'].max()][ 'Party'].values[0]
print(f"\nParty with the maximum seats: {max_seats_party}")

# Party with the minimum seats (excluding zero seats if any)
min_seats_party = df[df['Won'] == df[df['Won'] > 0]['Won'].min()][ 'Party'].values[0]
print(f"Party with the minimum seats (excluding zero seats if any): {min_seats_party}")

# Visualize the data
import matplotlib.pyplot as plt

# Bar plot of seats won by each party
plt.figure(figsize=(10, 8))
plt.barh(df['Party'], df['Won'], color='skyblue')
plt.xlabel('Number of Seats Won')
plt.ylabel('Party')
```

```
plt.title('Number of Seats Won by Each Party')  
plt.show()
```

First few rows of the data:

	Party	Won	Vote_share
0	Bharatiya Janata Party - BJP	240	36.9
1	Indian National Congress - INC	99	21.4
2	Samajwadi Party - SP	37	4.6
3	All India Trinamool Congress - AITC	29	4.4
4	Dravida Munnetra Kazhagam - DMK	22	1.8

Basic summary statistics:

	Won	Vote_share
count	42.000000	42.000000
mean	12.928571	2.154762
std	39.466808	6.437588
min	1.000000	0.000000
25%	1.000000	0.100000
50%	2.000000	0.300000
75%	6.500000	1.450000
max	240.000000	36.900000

Total number of seats: 543

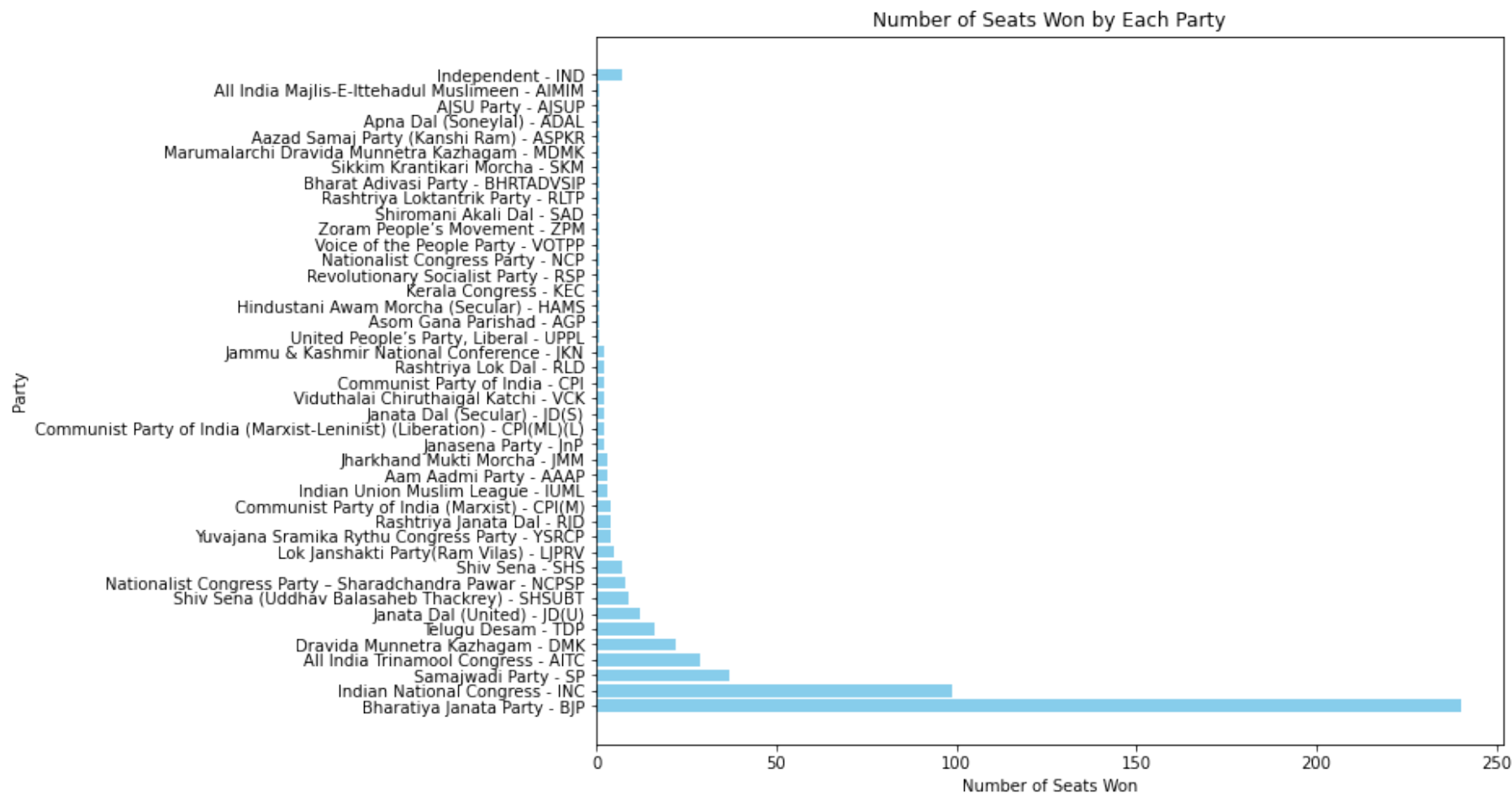
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5	Telugu Desam - TDP	0.029466
6	Janata Dal (United) - JD(U)	0.022099
7	Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT	0.016575
8	Nationalist Congress Party - Sharadchandra Paw...	0.014733
9	Shiv Sena - SHS	0.012891
10	Lok Janshakti Party(Ram Vilas) - LJPRV	0.009208
11	Yuva Jana Sramika Rythu Congress Party - YSRCP	0.007366
12	Rashtriya Janata Dal - RJD	0.007366
13	Communist Party of India (Marxist) - CPI(M)	0.007366
14	Indian Union Muslim League - IUML	0.005525
15	Aam Aadmi Party - AAP	0.005525
16	Jharkhand Mukti Morcha - JMM	0.005525
17	Janasena Party - JnP	0.003683

18	Communist Party of India (Marxist-Leninist) (L...	0.003683
19	Janata Dal (Secular) - JD(S)	0.003683
20	Viduthalai Chiruthaigal Katchi - VCK	0.003683
21	Communist Party of India - CPI	0.003683
22	Rashtriya Lok Dal - RLD	0.003683
23	Jammu & Kashmir National Conference - JKN	0.003683
24	United People's Party, Liberal - UPPL	0.001842
25	Asom Gana Parishad - AGP	0.001842
26	Hindustani Awam Morcha (Secular) - HAMS	0.001842
27	Kerala Congress - KEC	0.001842
28	Revolutionary Socialist Party - RSP	0.001842
29	Nationalist Congress Party - NCP	0.001842
30	Voice of the People Party - VOTPP	0.001842
31	Zoram People's Movement - ZPM	0.001842
32	Shiromani Akali Dal - SAD	0.001842
33	Rashtriya Loktantrik Party - RLTP	0.001842
34	Bharat Adivasi Party - BHRTADVSIP	0.001842
35	Sikkim Krantikari Morcha - SKM	0.001842
36	Marumalarchi Dravida Munnetra Kazhagam - MDMK	0.001842
37	Aazad Samaj Party (Kanshi Ram) - ASPKR	0.001842
38	Apna Dal (Soneylal) - ADAL	0.001842
39	AJSU Party - AJSUP	0.001842
40	All India Majlis-E-Ittehadul Muslimeen - AIMIM	0.001842
41	Independent - IND	0.012891

Party with the maximum seats: Bharatiya Janata Party - BJP

Party with the minimum seats (excluding zero seats if any): United People's Party, Liberal - UPPL



```
In [30]: import matplotlib.pyplot as plt

# Load the data
file_path = r'C:\Users\neeraj\Downloads\party_seats (2).xlsx' # Update the path as necessary
# or
# file_path = 'path/to/your/party_seats.xlsx'

df = pd.read_excel(file_path)

# Display the first few rows of the data
print("First few rows of the data:")
```

```
print(df.head())

party_abbreviations = {
    'Bharatiya Janata Party - BJP': 'BJP',
    'Indian National Congress - INC': 'INC',
    'Samajwadi Party - SP': 'SP',
    'All India Trinamool Congress - AITC': 'AITC',
    'Dravida Munnetra Kazhagam - DMK': 'DMK',
    'Telugu Desam - TDP': 'TDP',
    'Janata Dal (United) - JD(U)': 'JD',
    'Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT': 'SHSUBT',
    'Nationalist Congress Party - Sharadchandra Pawar - NCPSP': 'NCPSP',
    'Shiv Sena - SHS': 'SHS',
    'Lok Janshakti Party(Ram Vilas) - LJPRV': 'LJPRV',
    'Yuva Jana Sramika Rythu Congress Party - YSRCP': 'YSRCP',
    # Add more mappings as needed
}

df['Party'] = df['Party'].map(party_abbreviations)

def my_autopct(pct):
    return f'{pct:.1f}%' if pct >= 1 else ''
# Constructing the pie chart
plt.figure(figsize=(15, 10))

# Creating the pie chart
plt.pie(df['Won'], labels=df['Party'], autopct=lambda pct: f'{int(pct/100*sum(df["Won"]))}', startangle=140, textprops={'fontstyle': 'italic'})
# Adding a title

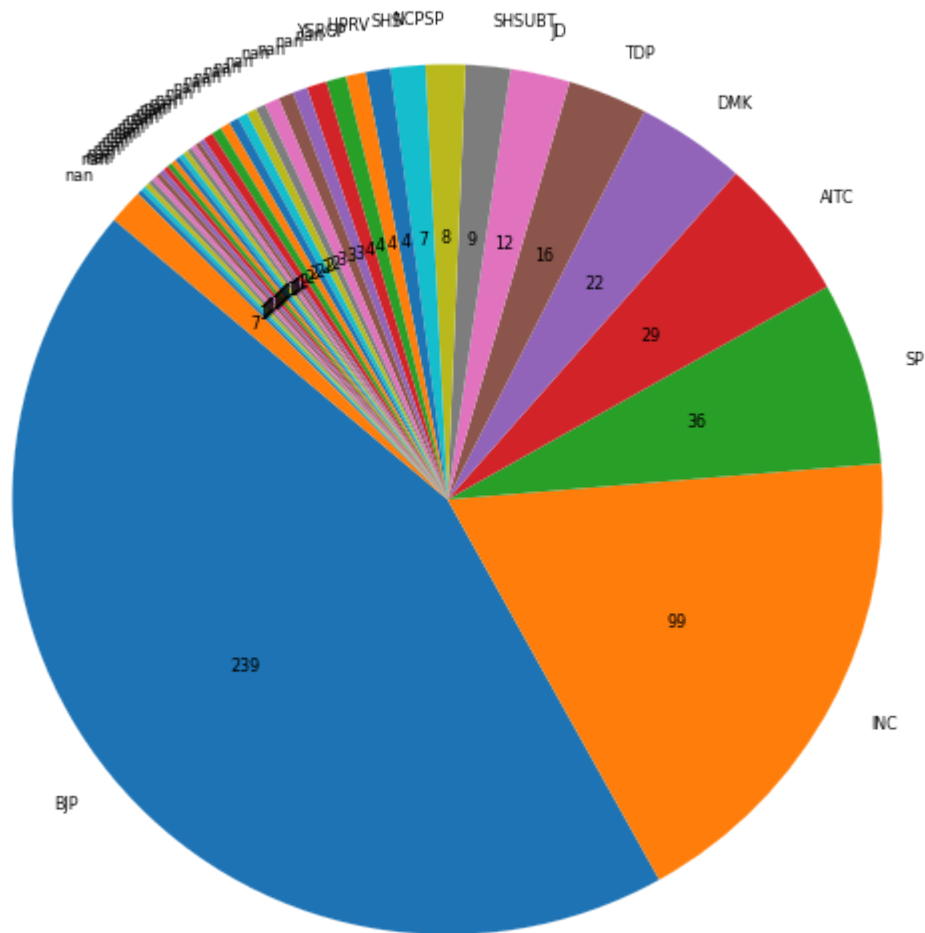
# Adding a title
plt.title('Distribution of Seats Won by Each Party')

# Displaying the pie chart
plt.show()
```

First few rows of the data:

	Party	Won	Vote_share
0	Bharatiya Janata Party - BJP	240	36.9
1	Indian National Congress - INC	99	21.4
2	Samajwadi Party - SP	37	4.6
3	All India Trinamool Congress - AITC	29	4.4
4	Dravida Munnetra Kazhagam - DMK	22	1.8

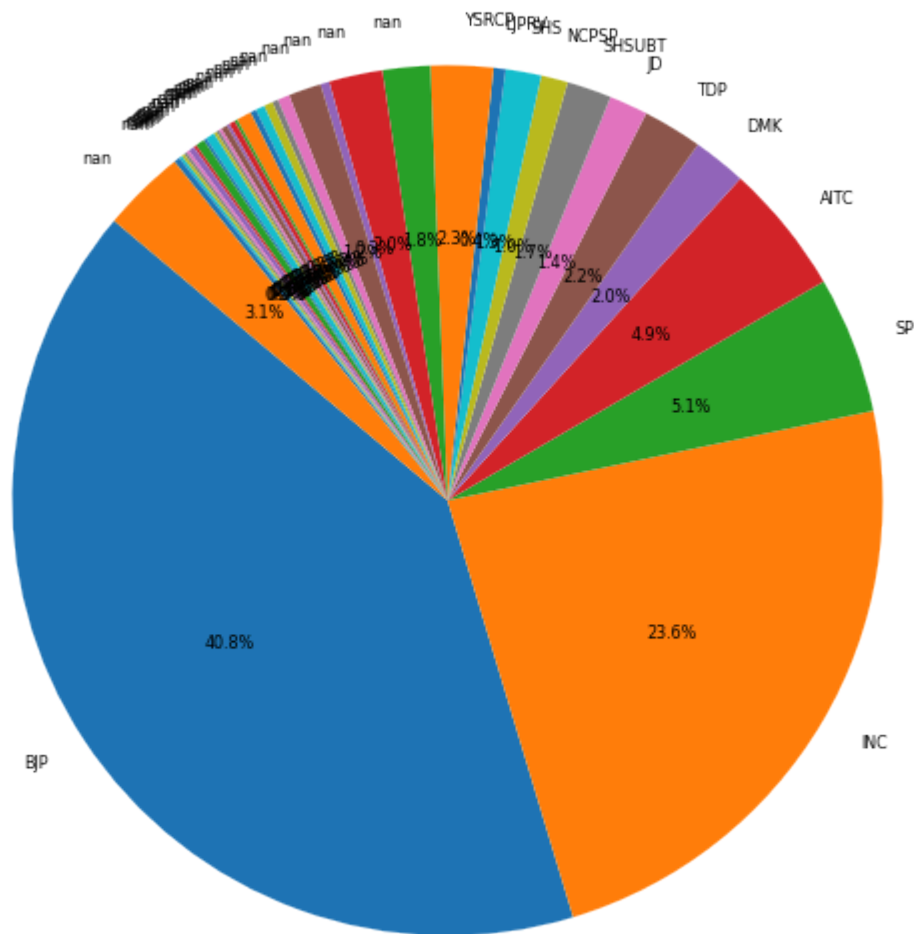
Distribution of Seats Won by Each Party



```
In [35]: plt.figure(figsize=(15, 10))
plt.pie(df['Vote_share'], labels=df['Party'], autopct='%1.1f%%', startangle=140, textprops={'fontsize': 8})
plt.title('Distribution of Vote share Won by Each Party')
```

```
Out[35]: Text(0.5, 1.0, 'Distribution of Vote share Won by Each Party')
```

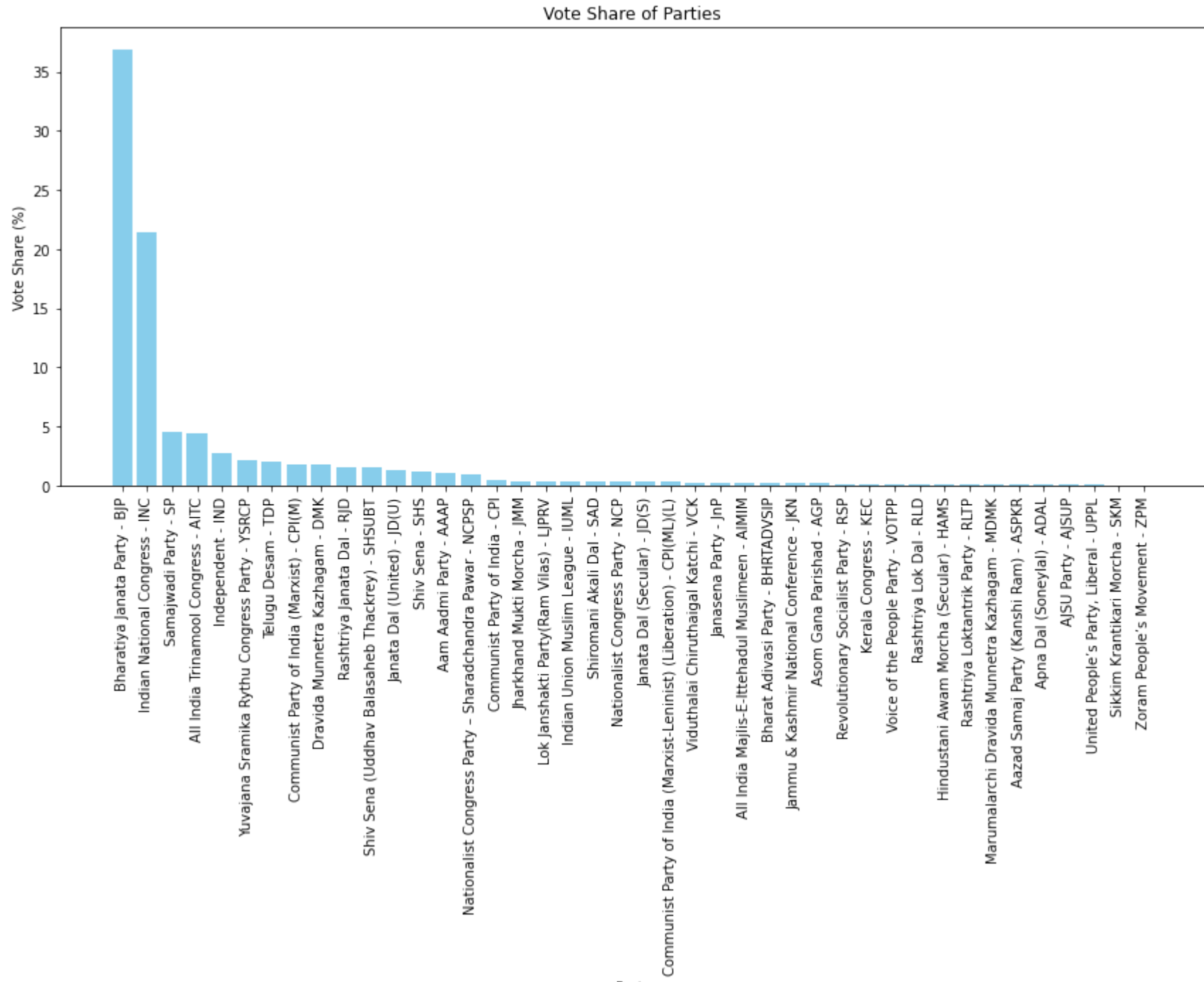
Distribution of Vote share Won by Each Party



```
In [55]: file_path = r'C:\Users\neeraj\Downloads\party_seats (2).xlsx'
df = pd.read_excel(file_path)
df.sort_values(by='Vote_share', ascending=False, inplace=True)

# Plotting the bar graph
plt.figure(figsize=(12, 10))
```

```
plt.bar(df['Party'], df['Vote_share'], color='skyblue')
plt.xlabel('Party')
plt.ylabel('Vote Share (%)')
plt.title('Vote Share of Parties')
plt.xticks(rotation=90)
plt.tight_layout()
# Show plot
plt.show()
```



Party

```

In [75]: import matplotlib.pyplot as plt
import numpy as np

# Data
parameters = [
    'Total registered electors', 'Male Electors', 'Female Electors', 'Third Gender Electors',
    'PwD Electors', 'Electors under 18-19 age group', 'Electors under 20-29 age group',
    '80+ Electors', 'Centenarian (100+) Electors', 'Electors/Population ratio', 'Gender Ratio'
]

draft_electoral_roll = [
    957352077, 492632344, 464680073, 39659, 8232167, 11648090, 178114233, 20784776, 602798, 65.99, 943
]

final_electoral_roll = [
    968821926, 497231994, 471541888, 48044, 8835449, 18481610, 197437160, 18592918, 238791, 66.76, 948
]

# Create bar graphs
x = np.arange(len(parameters))
width = 0.35

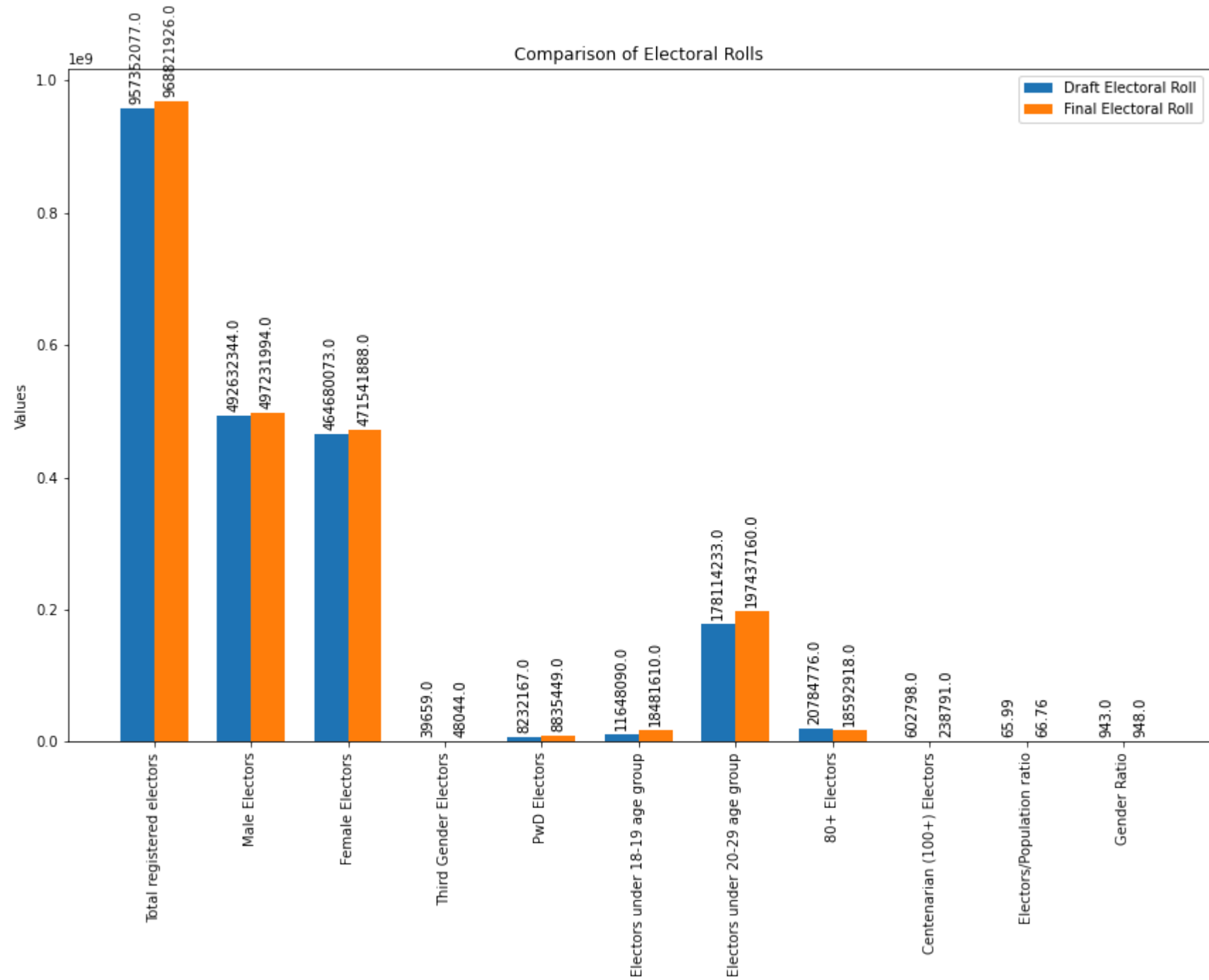
fig, ax = plt.subplots(figsize=(12, 10))
bars1 = ax.bar(x - width/2, draft_electoral_roll, width, label='Draft Electoral Roll')
bars2 = ax.bar(x + width/2, final_electoral_roll, width, label='Final Electoral Roll')

# Add labels, title, and custom x-axis tick labels
ax.set_xlabel('Parameters')
ax.set_ylabel('Values')
ax.set_title('Comparison of Electoral Rolls')
ax.set_xticks(x)
ax.set_xticklabels(parameters, rotation=90)
ax.legend()

# Attach a text label above each bar, displaying its height
for bars in [bars1, bars2]:
    for bar in bars:
        height = bar.get_height()

```

```
ax.annotate(f'{height}',  
            xy=(bar.get_x() + bar.get_width() / 2, height),  
            xytext=(0, 3), # 3 points vertical offset  
            textcoords="offset points",  
            ha='center', va='bottom',  
            rotation=90) # Rotate the text  
  
# Adjust layout  
plt.tight_layout()  
  
# Display the plot  
plt.show()
```



Parameters

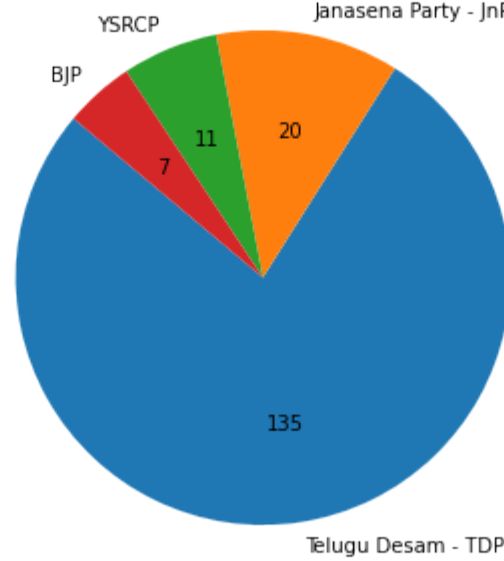
```
In [83]: import matplotlib.pyplot as plt

# Data
parties = ['Telugu Desam - TDP', 'Janasena Party - JnP', 'YSRCP', 'BJP']
mla_seats = [135, 21, 11, 8]
vote_share = [38.3, 4.4, 40, 11.4] # Assuming percentages based on the context

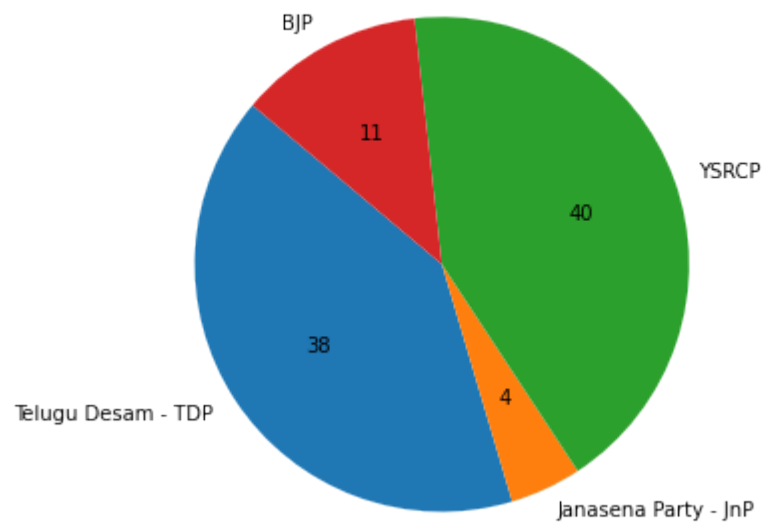
# Pie chart for MLA Seats
plt.figure(figsize=(10, 5))
plt.pie(mla_seats, labels=parties, autopct=lambda pct: f'{int(pct/100*sum(mla_seats))}', startangle=140)
plt.title('MLA Seats Distribution in Andhra Pradesh 2024 Elections')
plt.axis('equal') # Equal aspect ratio ensures that pie is drawn as a circle.
plt.show()

# Pie chart for Vote Share
plt.figure(figsize=(10, 5))
plt.pie(vote_share, labels=parties, autopct=lambda pct: f'{int(pct/100*sum(vote_share))}', startangle=140)
plt.title('Vote Share Distribution in Andhra Pradesh 2024 Elections')
plt.axis('equal') # Equal aspect ratio ensures that pie is drawn as a circle.
plt.show()
```


MLA Seats Distribution in Andhra Pradesh 2024 Elections



Vote Share Distribution in Andhra Pradesh 2024 Elections



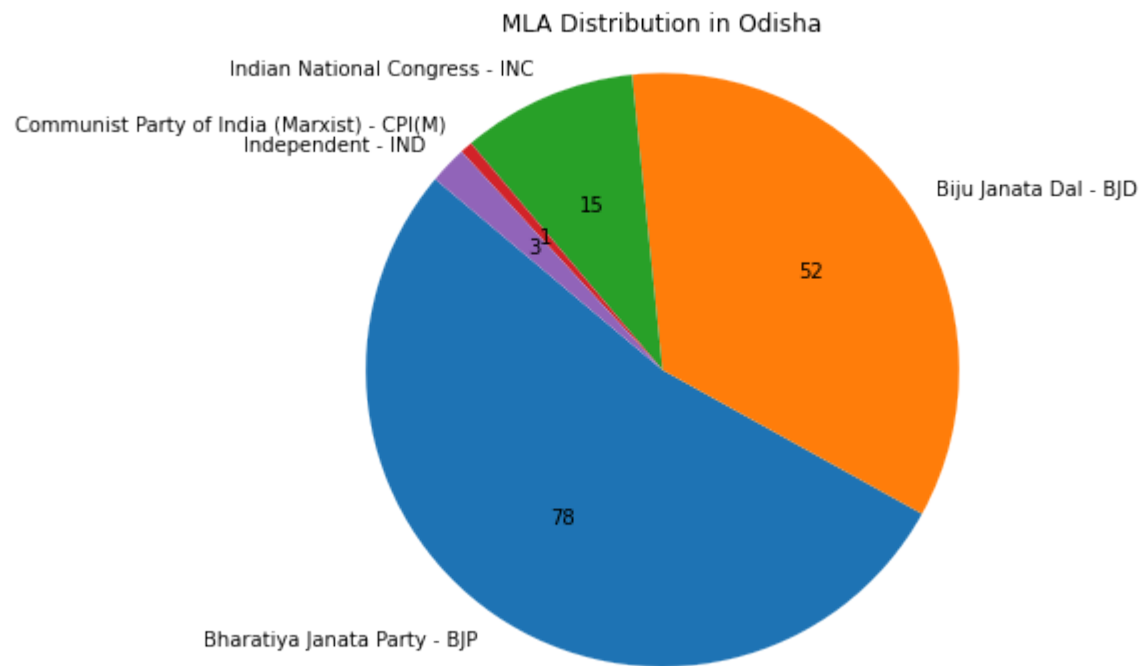
```
In [96]: import matplotlib.pyplot as plt
import math
# Data
```

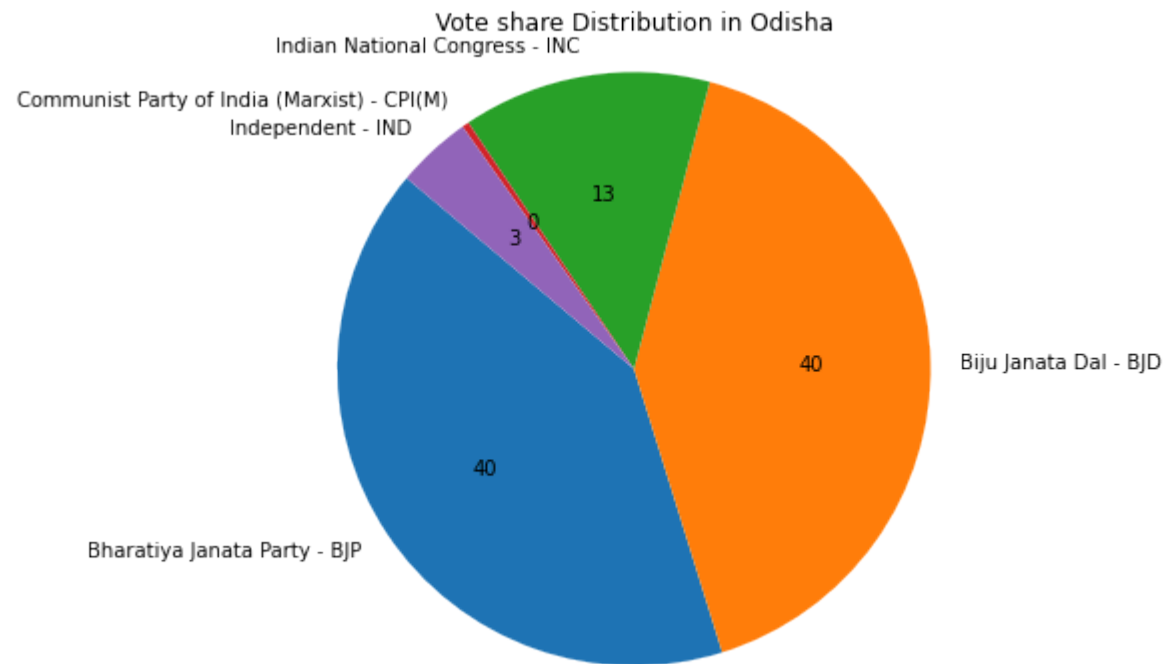
```

parties = ['Bharatiya Janata Party - BJP', 'Biju Janata Dal - BJD', 'Indian National Congress - INC',
           'Communist Party of India (Marxist) - CPI(M)', 'Independent - IND']
mlas = [78, 51, 14, 1, 3] # Number of MLAs for each party
vote=[40.07,40.22,13.26,0.37,4]
# Pie chart for MLA distribution in Odisha
plt.figure(figsize=(10, 6))
plt.pie(mlas, labels=parties, autopct=lambda pct: f'{math.ceil(pct/100*sum(mlas))}', startangle=140)
plt.title('MLA Distribution in Odisha')
plt.axis('equal') # Equal aspect ratio ensures that pie is drawn as a circle.
plt.show()

plt.figure(figsize=(10, 6))
plt.pie(vote, labels=parties, autopct=lambda pct: f'{int(pct/100*sum(vote))}', startangle=140)
plt.title('Vote share Distribution in Odisha')
plt.axis('equal') # Equal aspect ratio ensures that pie is drawn as a circle.
plt.show()

```





In []:

In []: