

```
import pandas as pd
df = pd.read_csv("~/content/drive/MyDrive/dataset/election_results_2024.csv")
df.head(5)
```

	Constituency	Const. No	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status
0	ALWAR	13	BHAGIRATH CHOUDHARY	Bharatiya Janata Party	RAMCHANDRA CHOUDHARY	Indian National Congress	329991	Result Declared
1	ALWAR	8	BRUPENDER YADAV	Bharatiya Janata Party	LALIT YADAV	Indian National Congress	48282	Result Declared
2	AMBALA	1	VARUN CHAUDHRY	Indian National Congress	BANTO KATARIA	Bharatiya Janata Party	49036	Result Declared
3	ANANTNAG-RAJOURI	3	MIAN ALTAF AHMAD	Jammu & Kashmir National Conference	MEHBOOBA MUFTI	Jammu & Kashmir Peoples Democratic Party	281794	Result Declared
4	ARAKKONAM	7	S.JAGATHRATHAKKAN	Dravida Munnetra Kazhagam	L.VIJAYAN	All India Anna Dravida Munnetra Kazhagam	306559	Result Declared

Next steps: [Generate code with df](#) [View recommended plots](#)

```
df.drop(columns = ['Const. No.'], inplace = True)

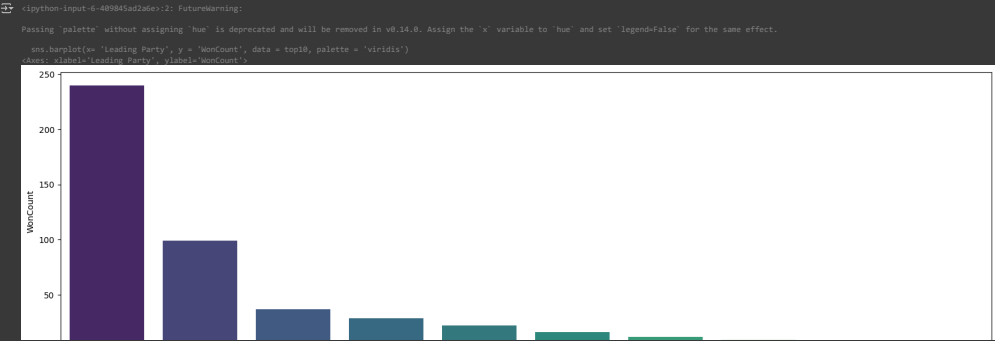
df['Margin'] = pd.to_numeric(df['Margin'], errors = 'coerce')
```

1. TOP 10 LIST OF WINNING PARTIES

```
wins = df.groupby('Leading Party')['Leading Party'].count()
wins = pd.DataFrame(wins)
wins = wins.rename(columns = {'Leading Party': 'WonCount'})
Won_seat = wins.sort_values(by = ['WonCount'], ascending = False)
```

```
import matplotlib.pyplot as plt
import seaborn as sns
top10 = Won_seat.head(10)
```

```
plt.figure(figsize=(20,6))
sns.barplot(x= 'Leading Party', y = 'WonCount', data = top10, palette = 'viridis')
```



2. DETAIL FOR STAR MEMBERS

RAHUL GANDHI , NARENDRA MODI, AMIT SHAH, NITIN JAIRAM GADKARI, AKHILESH YADAV

```
candidates = ['RAHUL GANDHI', 'NARENDRA MODI', 'AMIT SHAH', 'NITIN JAIRAM GADKARI', 'AKHILESH YADAV', 'SHRITI IRANI']
```

```
for c in candidates:
    # winner check
    if c in df['Leading Candidate'].values:
        row1 = df[df['Leading Candidate'] == c][['Leading Candidate','Constituency', 'Margin']]
        roww1 = pd.DataFrame(row1)
        print(roww1)
    # Loser check
    elif c in df['Trailing Candidate'].values:
        row2 = df[df['Trailing Candidate'] == c][['Trailing Candidate', 'Constituency', 'Margin']]
        print(row2)
    else:
        print('Not Participated')
```

	Leading Candidate	Constituency	Margin
430	RAHUL GANDHI	Rae Bareilly	390030.0
539	RAHUL GANDHI	Wayanad	364422.0
Leading Candidate Constituency Margin			
533	NARENDRA MODI	Varanasi	152513.0
Leading Candidate Constituency Margin			
186	AMIT SHAH	Gandhinagar	744716.0
Leading Candidate Constituency Margin			
374	NITIN JAIRAM GADKARI	Nagpur	137603.0
Leading Candidate Constituency Margin			
276	AKHILESH YADAV	Kannauj	170922.0
Trailing Candidate Constituency Margin			
21	SHRITI IRANI	Ameethi	167196.0

Alternate way

```
candidates = ['RAHUL GANDHI', 'NARENDRA MODI', 'AMIT SHAH', 'NITIN JAIRAM GADKARI', 'AKHILESH YADAV', 'SHRITI IRANI']
winner = df[df['Leading Candidate'].isin(candidates)][['Leading Candidate','Constituency','Margin']]
Loser = df[df['Trailing Candidate'].isin(candidates)][['Trailing Candidate','Constituency','Margin']]
pd.concat([winner, Loser], axis = 0)
```

	Leading Candidate	Constituency	Margin	Trailing Candidate
186	AMIT SHAH	Gandhinagar	744716.0	NaN
276	AKHILESH YADAV	Kannauj	170922.0	NaN
374	NITIN JAIRAM GADKARI	Nagpur	137603.0	NaN
430	RAHUL GANDHI	Rae Bareilly	390030.0	NaN
533	NARENDRA MODI	Varanasi	152513.0	NaN
539	RAHUL GANDHI	Wayanad	364422.0	NaN
21	NaN	Ameethi	167196.0	SHRITI IRANI

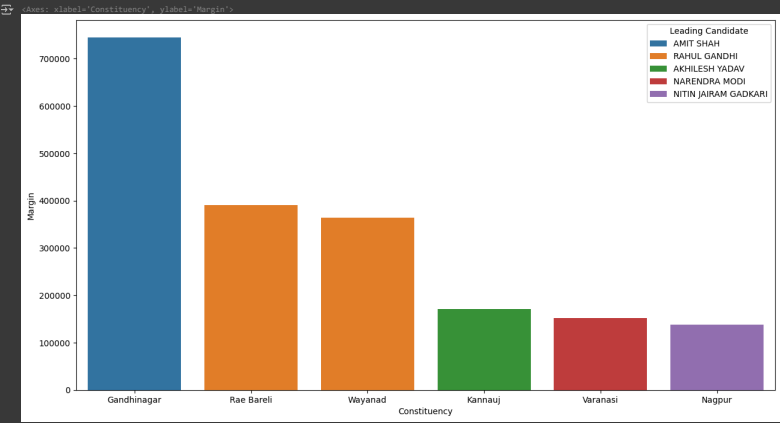
winning graph to check highest margin

```
candidates = ['RAHUL GANDHI', 'NARENDRA MODI', 'AMIT SHAH', 'NITIN JAIRAM GADKARI', 'AKHILESH YADAV', 'SHRITI IRANI']
winner = df[df['Leading Candidate'].isin(candidates)][['Leading Candidate','Constituency','Margin']]
winnerplot = winner.sort_values(by = ['Margin'], ascending = [False])
winnerplot
```

	Leading Candidate	Constituency	Margin
186	AMIT SHAH	Gandhinagar	744716.0
430	RAHUL GANDHI	Rae Bareilly	390030.0
539	RAHUL GANDHI	Wayanad	364422.0
276	AKHILESH YADAV	Kannauj	170922.0
533	NARENDRA MODI	Varanasi	152513.0
374	NITIN JAIRAM GADKARI	Nagpur	137603.0

Next steps: [Generate code with winnerplot](#) [View recommended plots](#)

```
plt.figure(figsize=(15,8))
sns.barplot(x = 'Constituency', y = 'Margin', hue = 'Leading Candidate',data = winnerplot)
```



3. Highest and lowest margin victory candidate

Candidate Name | Margin -> cond: Name from leading list

```
df['Margin'] = pd.to_numeric(df['Margin'], errors = 'coerce')
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 543 entries, 0 to 542
Data columns (total 7 columns):
# Column      Non-Null Count  Dtype
---  ---
0 Constituency  543 non-null    object
1 Leading Candidate  543 non-null    object
2 Leading Party  543 non-null    object
3 Trailing Candidate  542 non-null    object
4 Trailing Party  542 non-null    object
5 Margin        542 non-null    float64
6 Status        543 non-null    object
dtypes: float64(1), object(6)
memory usage: 29.8+ KB
```

```
Victory = df[['Leading Candidate', 'Leading Party', 'Margin']]
Victory = Victory.sort_values(by=['Margin'], ascending=[False])
print(Victory)
```

```
221      Leading Candidate  Leading Party  Margin
157      RAKIBUL HUSSAIN  Indian National Congress  1812476.0
525      SHIVRAJ SINGH CHOUDHAN  Bharatiya Janata Party  821488.0
384      C R PRATEL  Bharatiya Janata Party  773551.0
186      AMIT SHAH  Bharatiya Janata Party  744716.0
...
226      RAO RAJENDRA SINGH  Bharatiya Janata Party  1615.0
236      RABINDRA NARAYAN BEHERA  Bharatiya Janata Party  1587.0
48      ADV ADOOR PHAKASH  Indian National Congress  684.0
357      RAVINDRA DATTARAM WAIKAR  Shiv Sena  48.0
493      MUKESHKUMAR CHANDRAKAANT DALAL  Bharatiya Janata Party  NaN
```

```
Ask = str(input('Want to see Top or Bottom list?: T/B'))
if(Ask == 'T'):
    a = int(input('Enter the top value to display'))
    print(Victory.head(a))
else:
    b = int(input('Enter the bottom value to display'))
    print(Victory.tail(b))
```

```
Want to see Top or Bottom list?: T/B
Enter the bottom value to display
226      RAO RAJENDRA SINGH  Bharatiya Janata Party  1615.0
236      RABINDRA NARAYAN BEHERA  Bharatiya Janata Party  1587.0
48      ADV ADOOR PHAKASH  Indian National Congress  684.0
357      RAVINDRA DATTARAM WAIKAR  Shiv Sena  48.0
493      MUKESHKUMAR CHANDRAKAANT DALAL  Bharatiya Janata Party  NaN
```

This is formatted as code

4. Vote % distribution by party

Leading Party details

Total Votes by party
sum(Votes) filtered by leading and trailing party
graph: x: sum(votes by party) y: Margin column

```
leadingvotes = df.groupby('Leading Party')['Margin'].sum()
leadingvotes = pd.DataFrame(leadingvotes)
leadingvotes = leadingvotes.sort_values(by = 'Margin', ascending = False)
```

```
def vote(x, leadingvotes, margin_col):
    per = x / leadingvotes[margin_col].sum()
    per = per*100
    return(per)
```

```
leadingvotes['Perct_Vote'] = leadingvotes['Margin'].apply(lambda x: vote(x, leadingvotes,'Margin'))
leadingvotes = leadingvotes.reset_index()
```

```
lead_top10 = leadingvotes.head(10).reset_index()
lead_top10
```

	Leading Party	Margin	Perct_Vote
0	Bharatiya Janata Party	46081536.0	52.369104
1	Indian National Congress	13005922.0	14.760357
2	Dravida Munnetra Kazhagam	5081582.0	5.774935
3	All India Trinamool Congress	4910963.0	5.581036
4	Telugu Desam	3660927.0	4.160440
5	Bahujan Samaj Party	2881966.0	3.281142
6	Jamhita Dal (United)	1386413.0	1.573581
7	Shiv Sena (Uddhav Balasaheb Thackeray)	1015430.0	1.153980
8	Communist Party of India (Marxist)	746237.0	0.848057
9	Lok Janshakti Party(Bam Vilas)	720603.0	0.818925

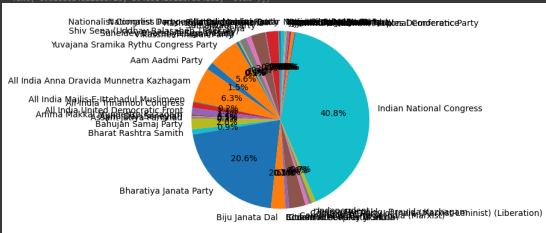
Next steps: [Generate code with lead_top10](#) [View recommended plots](#)

```
plt.pie(leadingvotes['Margin'], labels=leadingvotes['Leading Party'], autopct='%1.1f%%', startangle=140)
```

Party	Percentage
Bharatiya Janata Party	52.4%
Indian National Congress	14.8%
Dravida Munnetra Kazhagam	9.6%
All India Trinamool Congress	5.6%
Samajwadi Party	3.2%
Communist Party of India (Marxist)	2.4%
Communist Party of India	1.6%
Left Front	1.6%
Other parties	1.2%

```
sns.relplot(x = 'Trailing Party', y = 'Margin', data = Trailplot, kind = 'line', height = 10, aspect = 2.5)
```

```
plt.pie(Trailing_votes['Margin'], labels = Trailing_votes['Trailing Party'], autopct = '%1.1f%%', startangle = 140)
```



▼ ENTER THE CONSTITUENCY TO GET CANDIDATES DETAILS

```
df['Constituency'] = df['Constituency'].astype(str)
df['Constituency'] = df['Constituency'].str.upper()
```

```
df[df['Constituency'] == 'AJMER'][['Leading Candidate', 'Leading Party',
'Margin']]
```

	Leading Candidate	Leading Party	Margin
0	BHAGIRATH CHOUDHARY	Bharatiya Janata Party	329991.0

```
Ask = str(input('Enter constituency name:___'))
Ask = Ask.upper()
if(Ask in df['Constituency'].values):
```