INDIAN ELECTION RESULT ANALYSIS

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TECHNOLOGICAL STACKS USED FOR THE PROJECT ARE

1)JUPYTER NOTEBOOK

2)PYTHON AS THE LANGUAGE

3)LIBRARIES SUCH AS –

- **a)pandas**
- **b)matplotlib**
- **c)seaborn**
- **d)requests**
- **e)beautiful soup**

I used the Requests library to send HTTP requests and retrieve the webpage's HTML content. After that, I utilized BeautifulSoup to parse the HTML and gather the required data. This involved pinpointing particular HTML tags and classes that held the relevant election results information.

1)IMPORTING LIBRARIES

IMPORTING RELEVANT LIBRARIES

```
import requests
from bs4 import BeautifulSoup
import csv
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

2)DATA COLLECTION

DATA COLLECTION

```
web  = requests.get("https://results.eci.gov.in/PcResultGenJune2024/index.htm")
print(web)
```

```
<Response [200]>
```

```
web.url
```

```
'https://results.eci.gov.in/PcResultGenJune2024/index.htm'
```

```
web.status_code
```

```
200
```

3)DATA TRANSFORMATION

DATA TRANSFORMATION

```
soup = BeautifulSoup(web.content,"html.parser")
```

```
print(soup.prettify())
```

4)WRITING DATA TO CSV FILE

WRITING THE DATA INTO A CSV FILE

```
csv_filename = 'election_results.csv'
csv_file = open(csv_filename, 'w', newline='', encoding='utf-8')
csv_writer = csv.writer(csv_file)
```

```
header = [th.text.strip() for th in data.find_all('th')]
csv_writer.writerow(header)

for row in data.find_all('tr'):
    csv_writer.writerow([td.text.strip() for td in row.find_all('td')])

csv_file.close()
```

KEY INSIGHTS FROM DATA

```
cleaned_data.head(10)
```

	Party	Won	Leading	Total
1	Bharatiya Janata Party - BJP	240	0	240
2	Indian National Congress - INC	99	0	99
3	Samajwadi Party - SP	37	0	37
4	All India Trinamool Congress - AITC	29	0	29
5	Dravida Munnetra Kazhagam - DMK	22	0	22
6	Telugu Desam - TDP	16	0	16
7	Janata Dal (United) - JD(U)	12	0	12
8	Shiv Sena (Uddhav Balasaheb Thackrey) - SHSUBT	9	0	9
9	Nationalist Congress Party – Sharadchandra Paw...	8	0	8
10	Shiv Sena - SHS	7	0	7

```
#getting party with low seats
```

```
cleaned_data.tail()
```

	Party	Won	Leading	Total
38	Aazad Samaj Party (Kanshi Ram) - ASPKR	1	0	1
39	Apna Dal (Soneylal) - ADAL	1	0	1
40	AJSU Party - AJSUP	1	0	1
41	All India Majlis-E-Ittehadul Muslimeen - AIMIM	1	0	1
42	Independent - IND	7	0	7

DATA VISUALIZATION:

DATA VISUALIZATION

BARGRAPH

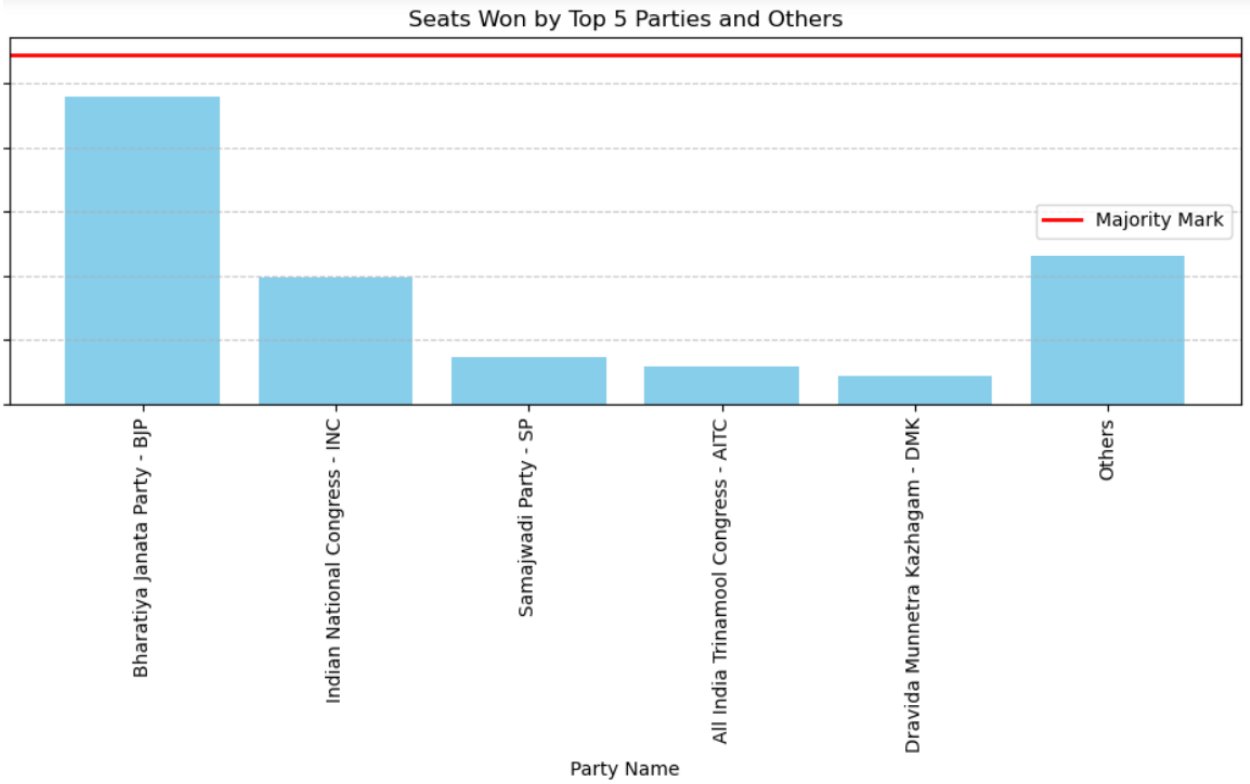
```
top_5_bargraph = cleaned_data.nlargest(5, 'Won')
other_seats = cleaned_data['Won'].sum() - top_5_bargraph['Won'].sum()

bargraph_data = top_5_bargraph.append({'Party': 'Others', 'Won': other_seats}, ignore_index=True)

plt.figure(figsize=(10, 6))
plt.bar(bargraph_data['Party'], bargraph_data['Won'], color='skyblue')
plt.axhline(y=majority_mark, color='r', linewidth=2, label='Majority Mark')
plt.xlabel('Party Name')
plt.ylabel('Number of Seats Won')
plt.title('Seats Won by Top 5 Parties and Others')
plt.xticks(rotation=90)
plt.grid(axis='y', linestyle='--', alpha=0.7,label='majority_mark')
plt.legend()
plt.tight_layout()



plt.show()
```



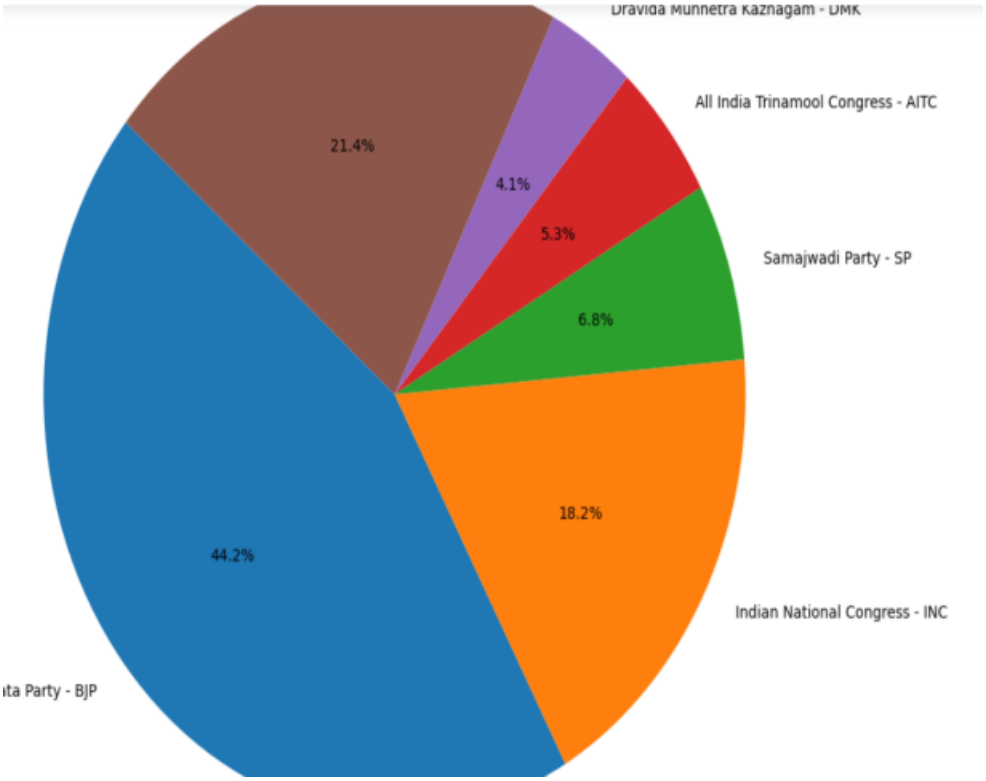
```
# we will see percentage of seats won by every party
```

```
top_5 = cleaned_data.nlargest(5, 'Won')


others = cleaned_data['Won'].sum() - top_5['Won'].sum()


combined_data = top_5.append({'Party': 'Others', 'Won': others}, ignore_index=True)


plt.figure(figsize=(12, 10))
plt.pie(combined_data['Won'], labels=combined_data['Party'], autopct='%1.1f%%', startangle=140)
plt.title('Seats Won by Top 5 Parties and Others')
plt.axis('equal')
plt.show()
```



HEATMAP

```
top5 = cleaned_data.head(5)

others_share = cleaned_data.iloc[5:]['Won'].sum()


plot_data = top5.append({'Party': 'Others', 'Won': others_share}, ignore_index=True)

heatmap_data = plot_data.pivot_table(index='Party', values='Won')

plt.figure(figsize=(10, 6))
sns.heatmap(heatmap_data, annot=True, cmap='YlGnBu', fmt='.1f', linewidths=.5)
plt.title('Vote Share Heatmap - Top 5 Parties and Others')
plt.xlabel(' Seats Won')
plt.ylabel('Party')
plt.yticks(rotation=0)
plt.tight_layout()
plt.show()
```