```
In [53]: import pandas as pd
         import numpy as np
         import matplotlib.pyplot as plt
         import seaborn as sns
```

```
In [54]: import plotly.express as px
         import plotly.offline as py
```

```
In [55]: df= pd.read_csv("D:/D.Desktop/Election 2024/Election 2024/election_results_2024.csv")
         df.head()
```

Out[55]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status
0	AJMER	13	BHAGIRATH CHOUDHARY	Bharatiya Janata Party	RAMCHANDRA CHOUDHARY	Indian National Congress	329991	Result Declared
1	ALWAR	8	BHUPENDER 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 JAGATHRATCHAKAN	Dravida Munnetra Kazhagam	L VIJAYAN	All India Anna Dravida Munnetra Kazhagam	306559	Result Declared

```
In [56]: df.Status.value_counts()
```

```
Out[56]: Result Declared    542
         Uncontested          1
         Name: Status, dtype: int64
```

```
In [57]: df[df['Status']=='Uncontested']
```

Out[57]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status
493	Surat	24	MUKESHKUMAR CHANDRAKAANT DALAL	Bharatiya Janata Party	NaN	NaN	-	Uncontested

```
In [58]: df.isnull().sum()
```

```
Out[58]: Constituency         0
         Const. No.           0
         Leading Candidate    0
         Leading Party        0
         Trailing Candidate   1
         Trailing Party       1
         Margin               0
         Status               0
         dtype: int64
```

```
In [59]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 543 entries, 0 to 542
Data columns (total 8 columns):
 #   Column             Non-Null Count  Dtype
---  ------             --------------  -----
 0   Constituency       543 non-null    object
 1   Const. No.         543 non-null    int64
 2   Leading Candidate  543 non-null    object
 3   Leading Party      543 non-null    object
 4   Trailing Candidate 542 non-null    object
 5   Trailing Party     542 non-null    object
 6   Margin             543 non-null    object
 7   Status             543 non-null    object
dtypes: int64(1), object(7)
memory usage: 34.1+ KB
```

```
In [60]: df.duplicated().sum()
```

```
Out[60]: 0
```

In [61]: `df.describe().T`

Out[61]:

	count	mean	std	min	25%	50%	75%	max
Const. No.	543.0	18.178637	16.42784	1.0	6.0	14.0	25.0	80.0

In [62]: `df['Leading Party'].unique()`

Out[62]:
```
array(['Bharatiya Janata Party', 'Indian National Congress',
       'Jammu & Kashmir National Conference', 'Dravida Munnetra Kazhagam',
       'Nationalist Congress Party – Sharadchandra Pawar',
       'Communist Party of India (Marxist)', 'Telugu Desam',
       'Samajwadi Party', 'Aam Aadmi Party',
       'Yuvajana Sramika Rythu Congress Party',
       'All India Trinamool Congress',
       'Communist Party of India (Marxist-Leninist) (Liberation)',
       'Shiv Sena', 'Rashtriya Janata Dal', 'Bharat Adivasi Party',
       'Independent', 'Rashtriya Lok Dal', 'Janata Dal (United)',
       'Asom Gana Parishad', 'Shiromani Akali Dal',
       'Viduthalai Chiruthaigal Katch', 'Jharkhand Mukti Morcha',
       'Hindustani Awam Morcha (Secular)', 'AJSU Party',
       'Lok Janshakti Party(Ram Vilas)',
       'Shiv Sena (Uddhav Balasaheb Thackrey)',
       'All India Majlis-E-Ittehadul Muslimeen', 'Janasena Party',
       'United People's Party, Liberal', 'Janata Dal (Secular)',
       'Revolutionary Socialist Party', 'Kerala Congress',
       'Zoram People's Movement', 'Indian Union Muslim League',
       'Apna Dal (Soneylal)', 'Communist Party of India',
       'Rashtriya Loktantrik Party', 'Aazad Samaj Party (Kanshi Ram)',
       'Nationalist Congress Party', 'Voice of the People Party',
       'Sikkim Krantikari Morcha',
       'Marumalarchi Dravida Munnetra Kazhagam'], dtype=object)
```

In [63]:
```python
leading_party_counts = df['Leading Party'].value_counts()
print(leading_party_counts)
total_counts = leading_party_counts.sum()
print(f"Total count of all unique 'Leading Party' values: {total_counts}")
```

```
Bharatiya Janata Party                                     240
Indian National Congress                                   99
Samajwadi Party                                            37
All India Trinamool Congress                               29
Dravida Munnetra Kazhagam                                  22
Telugu Desam                                               16
Janata Dal (United)                                        12
Shiv Sena (Uddhav Balasaheb Thackrey)                       9
Nationalist Congress Party – Sharadchandra Pawar            8
Shiv Sena                                                   7
Independent                                                 7
Lok Janshakti Party(Ram Vilas)                              5
Communist Party of India (Marxist)                          4
Yuvajana Sramika Rythu Congress Party                       4
Rashtriya Janata Dal                                        4
Indian Union Muslim League                                  3
Jharkhand Mukti Morcha                                      3
Aam Aadmi Party                                             3
Rashtriya Lok Dal                                           2
Communist Party of India (Marxist-Leninist) (Liberation)    2
Communist Party of India                                    2
Jammu & Kashmir National Conference                         2
Janasena Party                                              2
Janata Dal (Secular)                                        2
Viduthalai Chiruthaigal Katch                               2
Hindustani Awam Morcha (Secular)                            1
Sikkim Krantikari Morcha                                    1
Voice of the People Party                                   1
Nationalist Congress Party                                  1
Aazad Samaj Party (Kanshi Ram)                              1
Rashtriya Loktantrik Party                                  1
Shiromani Akali Dal                                         1
Apna Dal (Soneylal)                                         1
AJSU Party                                                  1
Zoram People's Movement                                     1
Kerala Congress                                             1
Revolutionary Socialist Party                               1
Asom Gana Parishad                                          1
United People's Party, Liberal                              1
Bharat Adivasi Party                                        1
All India Majlis-E-Ittehadul Muslimeen                      1
Marumalarchi Dravida Munnetra Kazhagam                      1
Name: Leading Party, dtype: int64
Total count of all unique 'Leading Party' values: 543
```

In [64]:
```python
df['location'] = df['Constituency']+", "+"INDIA"
df.head(2)
```

Out[64]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status	location
0	AJMER	13	BHAGIRATH CHOUDHARY	Bharatiya Janata Party	RAMCHANDRA CHOUDHARY	Indian National Congress	329991	Result Declared	AJMER, INDIA
1	ALWAR	8	BHUPENDER YADAV	Bharatiya Janata Party	LALIT YADAV	Indian National Congress	48282	Result Declared	ALWAR, INDIA

In [65]:
```python
#!pip install pandas geopy plotly
```

In [66]:
```python
# Only BJP Won
df[df['Leading Party']=='Bharatiya Janata Party']
```

Out[66]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status	location
0	AJMER	13	BHAGIRATH CHOUDHARY	Bharatiya Janata Party	RAMCHANDRA CHOUDHARY	Indian National Congress	329991	Result Declared	AJMER, INDIA
1	ALWAR	8	BHUPENDER YADAV	Bharatiya Janata Party	LALIT YADAV	Indian National Congress	48282	Result Declared	ALWAR, INDIA
6	Adilabad	1	GODAM NAGESH	Bharatiya Janata Party	ATHRAM SUGUNA	Indian National Congress	90652	Result Declared	Adilabad, INDIA
7	Agra	18	PROF S P SINGH BAGHEL	Bharatiya Janata Party	SURESH CHAND KARDAM	Samajwadi Party	271294	Result Declared	Agra, INDIA
8	Ahmedabad East	7	HASMUKHBHAI PATEL (H.S.PATEL)	Bharatiya Janata Party	HIMMATSINH PRAHLADSINH PATEL	Indian National Congress	461755	Result Declared	Ahmedabad East, INDIA
...	...	...	...	...	...	...	...	...	...
525	VIDISHA	18	SHIVRAJ SINGH CHOUHAN	Bharatiya Janata Party	PRATAPBHANU SHARMA	Indian National Congress	821408	Result Declared	VIDISHA, INDIA
529	Vadodara	20	DR. HEMANG JOSHI	Bharatiya Janata Party	PADHIYAR JASHPALSINH MAHENDRASINH (BAPU)	Indian National Congress	582126	Result Declared	Vadodara, INDIA
532	Valsad	26	DHAVAL LAXMANBHAI PATEL	Bharatiya Janata Party	ANANTKUMAR HASMUKHBHAI PATEL	Indian National Congress	210704	Result Declared	Valsad, INDIA
533	Varanasi	77	NARENDRA MODI	Bharatiya Janata Party	AJAY RAI	Indian National Congress	152513	Result Declared	Varanasi, INDIA
540	West Delhi	6	KAMALJEET SEHRAWAT	Bharatiya Janata Party	MAHABAL MISHRA	Aam Aadmi Party	199013	Result Declared	West Delhi, INDIA

240 rows × 9 columns

In [67]:
```python
# Only Congress Won
df[df['Leading Party']=='Indian National Congress']
```

Out[67]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status	location
2	AMBALA	1	VARUN CHAUDHRY	Indian National Congress	BANTO KATARIA	Bharatiya Janata Party	49036	Result Declared	AMBALA, INDIA
13	Alappuzha	15	K. C VENUGOPAL	Indian National Congress	A. M ARIFF	Communist Party of India (Marxist)	63513	Result Declared	Alappuzha, INDIA
17	Allahabad	52	UJJWAL RAMAN SINGH	Indian National Congress	NEERAJ TRIPATHI	Bharatiya Janata Party	58795	Result Declared	Allahabad, INDIA
21	Amethi	37	KISHORI LAL	Indian National Congress	SMRITI IRANI	Bharatiya Janata Party	167196	Result Declared	Amethi, INDIA
22	Amravati	7	BALWANT BASWANT WANKHADE	Indian National Congress	NAVNEET RAVI RANA	Bharatiya Janata Party	19731	Result Declared	Amravati, INDIA
...	...	...	...	...	...	...	...	...	...
527	VIRUDHUNAGAR	34	MANICKAM TAGORE B	Indian National Congress	VIJAYAPRABHAKARAN V	Desiya Murpokku Dravida Kazhagam	4379	Result Declared	VIRUDHUNAGAR, INDIA
528	Vadakara	3	SHAFI PARAMBIL	Indian National Congress	K K SHAILAJA TEACHER	Communist Party of India (Marxist)	114506	Result Declared	Vadakara, INDIA
537	Warangal	15	KADIYAM KAVYA	Indian National Congress	AROORI RAMESH	Bharatiya Janata Party	220339	Result Declared	Warangal, INDIA
539	Wayanad	4	RAHUL GANDHI	Indian National Congress	ANNIE RAJA	Communist Party of India	364422	Result Declared	Wayanad, INDIA
542	Zahirabad	5	SURESH KUMAR SHETKAR	Indian National Congress	B. B. PATIL	Bharatiya Janata Party	46188	Result Declared	Zahirabad, INDIA

99 rows × 9 columns

In [68]:
```python
# Parties other than BJP and Congress as leading and trailing and vise-a-versa
df[(df['Leading Party']!="Bharatiya Janata Party")&(df['Leading Party']!="Indian National Congress")]
```

Out[68]:

	Constituency	Const. No.	Leading Candidate	Leading Party	Trailing Candidate	Trailing Party	Margin	Status	location
3	ANANTNAG-RAJOURI	3	MIAN ALTAF AHMAD	Jammu & Kashmir National Conference	MEHBOOBA MUFTI	Jammu & Kashmir Peoples Democratic Party	281794	Result Declared	ANANTNAG-RAJOURI, INDIA
4	ARAKKONAM	7	S JAGATHRATCHAKAN	Dravida Munnetra Kazhagam	L VIJAYAN	All India Anna Dravida Munnetra Kazhagam	306559	Result Declared	ARAKKONAM, INDIA
5	ARANI	12	THARANIVENTHAN M S	Dravida Munnetra Kazhagam	GAJENDRAN, G.V.	All India Anna Dravida Munnetra Kazhagam	208766	Result Declared	ARANI, INDIA
10	Ahmednagar	37	NILESH DNYANDEV LANKE	Nationalist Congress Party – Sharadchandra Pawar	DR. SUJAY RADHAKRISHNA VIKHEPATIL	Bharatiya Janata Party	28929	Result Declared	Ahmednagar, INDIA
14	Alathur	9	K.RADHAKRISHNAN	Communist Party of India (Marxist)	RAMYA HARIDAS	Indian National Congress	20111	Result Declared	Alathur, INDIA
...	...	...	...	...	...	...	...	...	...
534	Vijayawada	12	KESINENI SIVANATH (CHINNI)	Telugu Desam	KESINENI SRINIVAS (NANI)	Yuvajana Sramika Rythu Congress Party	282085	Result Declared	Vijayawada, INDIA
535	Visakhapatnam	4	SRIBHARAT MATHUKUMILI	Telugu Desam	JHANSI LAKSHMI. BOTCHA.	Yuvajana Sramika Rythu Congress Party	504247	Result Declared	Visakhapatnam, INDIA
536	Vizianagaram	3	APPALANAIDU KALISETTI	Telugu Desam	BELLANA CHANDRASEKHAR	Yuvajana Sramika Rythu Congress Party	249351	Result Declared	Vizianagaram, INDIA
538	Wardha	8	AMAR SHARADRAO KALE	Nationalist Congress Party – Sharadchandra Pawar	RAMDAS CHANDRABHAN TADAS	Bharatiya Janata Party	81648	Result Declared	Wardha, INDIA
541	Yavatmal-Washim	14	SANJAY UTTAMRAO DESHMUKH	Shiv Sena (Uddhav Balasaheb Thackrey)	RAJSHRITAI HEMANT PATIL (MAHALLE)	Shiv Sena	94473	Result Declared	Yavatmal-Washim, INDIA

204 rows × 9 columns

In [69]:
```python
def seats_won_by(party):
    seats_won=df[df['Leading Party']==party].shape[0]
    return seats_won
```

In [70]:
```python
seats_won_by("Bharatiya Janata Party")
```

Out[70]: 240

In [71]:
```python
seats_won_by("Indian National Congress")
```

Out[71]: 99

```python
for i in df['Leading Party'].unique():
    print(f"The seats won by {i.upper()} are {seats_won_by(i)}")
```

```
The seats won by BHARATIYA JANATA PARTY are 240
The seats won by INDIAN NATIONAL CONGRESS are 99
The seats won by JAMMU & KASHMIR NATIONAL CONFERENCE are 2
The seats won by DRAVIDA MUNNETRA KAZHAGAM are 22
The seats won by NATIONALIST CONGRESS PARTY – SHARADCHANDRA PAWAR are 8
The seats won by COMMUNIST PARTY OF INDIA (MARXIST) are 4
The seats won by TELUGU DESAM are 16
The seats won by SAMAJWADI PARTY are 37
The seats won by AAM AADMI PARTY are 3
The seats won by YUVAJANA SRAMIKA RYTHU CONGRESS PARTY are 4
The seats won by ALL INDIA TRINAMOOL CONGRESS are 29
The seats won by COMMUNIST PARTY OF INDIA (MARXIST-LENINIST) (LIBERATION) are 2
The seats won by SHIV SENA are 7
The seats won by RASHTRIYA JANATA DAL are 4
The seats won by BHARAT ADIVASI PARTY are 1
The seats won by INDEPENDENT are 7
The seats won by RASHTRIYA LOK DAL are 2
The seats won by JANATA DAL (UNITED) are 12
The seats won by ASOM GANA PARISHAD are 1
The seats won by SHIROMANI AKALI DAL are 1
The seats won by VIDUTHALAI CHIRUTHAIGAL KATCH are 2
The seats won by JHARKHAND MUKTI MORCHA are 3
The seats won by HINDUSTANI AWAM MORCHA (SECULAR) are 1
The seats won by AJSU PARTY are 1
The seats won by LOK JANSHAKTI PARTY(RAM VILAS) are 5
The seats won by SHIV SENA (UDDHAV BALASAHEB THACKREY) are 9
The seats won by ALL INDIA MAJLIS-E-ITTEHADUL MUSLIMEEN are 1
The seats won by JANASENA PARTY are 2
The seats won by UNITED PEOPLE'S PARTY, LIBERAL are 1
The seats won by JANATA DAL (SECULAR) are 2
The seats won by REVOLUTIONARY SOCIALIST PARTY are 1
The seats won by KERALA CONGRESS are 1
The seats won by ZORAM PEOPLE'S MOVEMENT are 1
The seats won by INDIAN UNION MUSLIM LEAGUE are 3
The seats won by APNA DAL (SONEYLAL) are 1
The seats won by COMMUNIST PARTY OF INDIA are 2
The seats won by RASHTRIYA LOKTANTRIK PARTY are 1
The seats won by AAZAD SAMAJ PARTY (KANSHI RAM) are 1
The seats won by NATIONALIST CONGRESS PARTY are 1
The seats won by VOICE OF THE PEOPLE PARTY are 1
The seats won by SIKKIM KRANTIKARI MORCHA are 1
The seats won by MARUMALARCHI DRAVIDA MUNNETRA KAZHAGAM are 1
```

```python
def seats_lost_by(party):
    seats_won=df[df['Trailing Party']==party].shape[0]
    return seats_won
```

In [74]:
```python
for i in df['Leading Party'].unique():
    print(f"The seats lost by {i.upper()} are {seats_lost_by(i)}")
```

```
The seats lost by BHARATIYA JANATA PARTY are 153
The seats lost by INDIAN NATIONAL CONGRESS are 167
The seats lost by JAMMU & KASHMIR NATIONAL CONFERENCE are 1
The seats lost by DRAVIDA MUNNETRA KAZHAGAM are 0
The seats lost by NATIONALIST CONGRESS PARTY – SHARADCHANDRA PAWAR are 3
The seats lost by COMMUNIST PARTY OF INDIA (MARXIST) are 17
The seats lost by TELUGU DESAM are 1
The seats lost by SAMAJWADI PARTY are 24
The seats lost by AAM AADMI PARTY are 13
The seats lost by YUVAJANA SRAMIKA RYTHU CONGRESS PARTY are 21
The seats lost by ALL INDIA TRINAMOOL CONGRESS are 13
The seats lost by COMMUNIST PARTY OF INDIA (MARXIST-LENINIST) (LIBERATION) are 2
The seats lost by SHIV SENA are 8
The seats lost by RASHTRIYA JANATA DAL are 18
The seats lost by BHARAT ADIVASI PARTY are 0
The seats lost by INDEPENDENT are 5
The seats lost by RASHTRIYA LOK DAL are 0
The seats lost by JANATA DAL (UNITED) are 4
The seats lost by ASOM GANA PARISHAD are 0
The seats lost by SHIROMANI AKALI DAL are 0
The seats lost by VIDUTHALAI CHIRUTHAIGAL KATCH are 0
The seats lost by JHARKHAND MUKTI MORCHA are 2
The seats lost by HINDUSTANI AWAM MORCHA (SECULAR) are 0
The seats lost by AJSU PARTY are 0
The seats lost by LOK JANSHAKTI PARTY(RAM VILAS) are 0
The seats lost by SHIV SENA (UDDHAV BALASAHEB THACKREY) are 10
The seats lost by ALL INDIA MAJLIS-E-ITTEHADUL MUSLIMEEN are 1
The seats lost by JANASENA PARTY are 0
The seats lost by UNITED PEOPLE'S PARTY, LIBERAL are 0
The seats lost by JANATA DAL (SECULAR) are 1
The seats lost by REVOLUTIONARY SOCIALIST PARTY are 0
The seats lost by KERALA CONGRESS are 0
The seats lost by ZORAM PEOPLE'S MOVEMENT are 0
The seats lost by INDIAN UNION MUSLIM LEAGUE are 0
The seats lost by APNA DAL (SONEYLAL) are 1
The seats lost by COMMUNIST PARTY OF INDIA are 4
The seats lost by RASHTRIYA LOKTANTRIK PARTY are 0
The seats lost by AAZAD SAMAJ PARTY (KANSHI RAM) are 0
The seats lost by NATIONALIST CONGRESS PARTY are 3
The seats lost by VOICE OF THE PEOPLE PARTY are 0
The seats lost by SIKKIM KRANTIKARI MORCHA are 0
The seats lost by MARUMALARCHI DRAVIDA MUNNETRA KAZHAGAM are 0
```

In [75]:
```python
# Total seats contested:

for i in df['Leading Party'].unique():
    print(f"The total seats contested by {i.upper()} are: {seats_won_by(i) + seats_lost_by(i)}")
```

```
The total seats contested by BHARATIYA JANATA PARTY are: 393
The total seats contested by INDIAN NATIONAL CONGRESS are: 266
The total seats contested by JAMMU & KASHMIR NATIONAL CONFERENCE are: 3
The total seats contested by DRAVIDA MUNNETRA KAZHAGAM are: 22
The total seats contested by NATIONALIST CONGRESS PARTY – SHARADCHANDRA PAWAR are: 11
The total seats contested by COMMUNIST PARTY OF INDIA (MARXIST) are: 21
The total seats contested by TELUGU DESAM are: 17
The total seats contested by SAMAJWADI PARTY are: 61
The total seats contested by AAM AADMI PARTY are: 16
The total seats contested by YUVAJANA SRAMIKA RYTHU CONGRESS PARTY are: 25
The total seats contested by ALL INDIA TRINAMOOL CONGRESS are: 42
The total seats contested by COMMUNIST PARTY OF INDIA (MARXIST-LENINIST) (LIBERATION) are: 4
The total seats contested by SHIV SENA are: 15
The total seats contested by RASHTRIYA JANATA DAL are: 22
The total seats contested by BHARAT ADIVASI PARTY are: 1
The total seats contested by INDEPENDENT are: 12
The total seats contested by RASHTRIYA LOK DAL are: 2
The total seats contested by JANATA DAL (UNITED) are: 16
The total seats contested by ASOM GANA PARISHAD are: 1
The total seats contested by SHIROMANI AKALI DAL are: 1
The total seats contested by VIDUTHALAI CHIRUTHAIGAL KATCH are: 2
The total seats contested by JHARKHAND MUKTI MORCHA are: 5
The total seats contested by HINDUSTANI AWAM MORCHA (SECULAR) are: 1
The total seats contested by AJSU PARTY are: 1
The total seats contested by LOK JANSHAKTI PARTY(RAM VILAS) are: 5
The total seats contested by SHIV SENA (UDDHAV BALASAHEB THACKREY) are: 19
The total seats contested by ALL INDIA MAJLIS-E-ITTEHADUL MUSLIMEEN are: 2
The total seats contested by JANASENA PARTY are: 2
The total seats contested by UNITED PEOPLE'S PARTY, LIBERAL are: 1
The total seats contested by JANATA DAL (SECULAR) are: 3
The total seats contested by REVOLUTIONARY SOCIALIST PARTY are: 1
The total seats contested by KERALA CONGRESS are: 1
The total seats contested by ZORAM PEOPLE'S MOVEMENT are: 1
The total seats contested by INDIAN UNION MUSLIM LEAGUE are: 3
The total seats contested by APNA DAL (SONEYLAL) are: 2
The total seats contested by COMMUNIST PARTY OF INDIA are: 6
The total seats contested by RASHTRIYA LOKTANTRIK PARTY are: 1
The total seats contested by AAZAD SAMAJ PARTY (KANSHI RAM) are: 1
The total seats contested by NATIONALIST CONGRESS PARTY are: 4
The total seats contested by VOICE OF THE PEOPLE PARTY are: 1
The total seats contested by SIKKIM KRANTIKARI MORCHA are: 1
The total seats contested by MARUMALARCHI DRAVIDA MUNNETRA KAZHAGAM are: 1
```
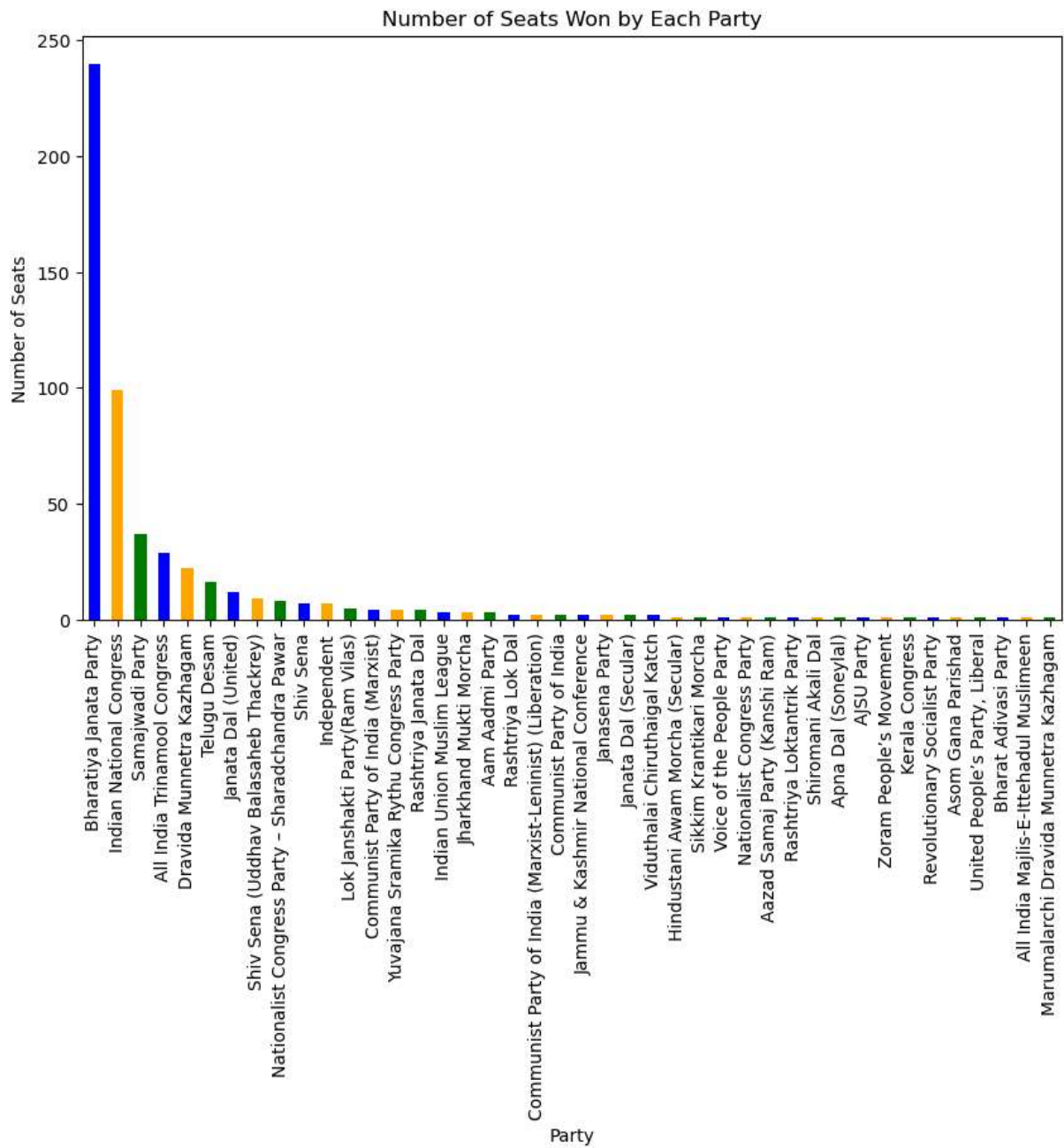
```
In [76]: # Win ratio with respect to total contested seats:

for i in df['Leading Party'].unique():
    print(f"The winning ratio of {i.upper()} is: {round(seats_won_by(i)/(seats_won_by(i) + seats_lost_by(i)),2)*100} %"
```

```
The winning ratio of BHARATIYA JANATA PARTY is: 61.0 %
The winning ratio of INDIAN NATIONAL CONGRESS is: 37.0 %
The winning ratio of JAMMU & KASHMIR NATIONAL CONFERENCE is: 67.0 %
The winning ratio of DRAVIDA MUNNETRA KAZHAGAM is: 100.0 %
The winning ratio of NATIONALIST CONGRESS PARTY – SHARADCHANDRA PAWAR is: 73.0 %
The winning ratio of COMMUNIST PARTY OF INDIA (MARXIST) is: 19.0 %
The winning ratio of TELUGU DESAM is: 94.0 %
The winning ratio of SAMAJWADI PARTY is: 61.0 %
The winning ratio of AAM AADMI PARTY is: 19.0 %
The winning ratio of YUVAJANA SRAMIKA RYTHU CONGRESS PARTY is: 16.0 %
The winning ratio of ALL INDIA TRINAMOOL CONGRESS is: 69.0 %
The winning ratio of COMMUNIST PARTY OF INDIA (MARXIST-LENINIST) (LIBERATION) is: 50.0 %
The winning ratio of SHIV SENA is: 47.0 %
The winning ratio of RASHTRIYA JANATA DAL is: 18.0 %
The winning ratio of BHARAT ADIVASI PARTY is: 100.0 %
The winning ratio of INDEPENDENT is: 57.99999999999999 %
The winning ratio of RASHTRIYA LOK DAL is: 100.0 %
The winning ratio of JANATA DAL (UNITED) is: 75.0 %
The winning ratio of ASOM GANA PARISHAD is: 100.0 %
The winning ratio of SHIROMANI AKALI DAL is: 100.0 %
The winning ratio of VIDUTHALAI CHIRUTHAIGAL KATCH is: 100.0 %
The winning ratio of JHARKHAND MUKTI MORCHA is: 60.0 %
The winning ratio of HINDUSTANI AWAM MORCHA (SECULAR) is: 100.0 %
The winning ratio of AJSU PARTY is: 100.0 %
The winning ratio of LOK JANSHAKTI PARTY(RAM VILAS) is: 100.0 %
The winning ratio of SHIV SENA (UDDHAV BALASAHEB THACKREY) is: 47.0 %
The winning ratio of ALL INDIA MAJLIS-E-ITTEHADUL MUSLIMEEN is: 50.0 %
The winning ratio of JANASENA PARTY is: 100.0 %
The winning ratio of UNITED PEOPLE'S PARTY, LIBERAL is: 100.0 %
The winning ratio of JANATA DAL (SECULAR) is: 67.0 %
The winning ratio of REVOLUTIONARY SOCIALIST PARTY is: 100.0 %
The winning ratio of KERALA CONGRESS is: 100.0 %
The winning ratio of ZORAM PEOPLE'S MOVEMENT is: 100.0 %
The winning ratio of INDIAN UNION MUSLIM LEAGUE is: 100.0 %
The winning ratio of APNA DAL (SONEYLAL) is: 50.0 %
The winning ratio of COMMUNIST PARTY OF INDIA is: 33.0 %
The winning ratio of RASHTRIYA LOKTANTRIK PARTY is: 100.0 %
The winning ratio of AAZAD SAMAJ PARTY (KANSHI RAM) is: 100.0 %
The winning ratio of NATIONALIST CONGRESS PARTY is: 25.0 %
The winning ratio of VOICE OF THE PEOPLE PARTY is: 100.0 %
The winning ratio of SIKKIM KRANTIKARI MORCHA is: 100.0 %
The winning ratio of MARUMALARCHI DRAVIDA MUNNETRA KAZHAGAM is: 100.0 %
```

In [77]:
```python
seats_won = df['Leading Party'].value_counts()

plt.figure(figsize=(10, 6))
seats_won.plot(kind='bar', color=['blue', 'orange', 'green'])
plt.title('Number of Seats Won by Each Party')
plt.xlabel('Party')
plt.ylabel('Number of Seats')
plt.show()
```


Number of Seats Won by Each Party

In [79]:
```python
# Filtered dataframes for specific party wins
bjp_wins = df[df['Leading Party'] == 'Bharatiya Janata Party']
congress_wins = df[df['Leading Party'] == 'Indian National Congress']
other_party_wins = df[(df['Leading Party'] != 'Bharatiya Janata Party') & (df['Leading Party'] != 'Indian National Congr

# Display filtered data
print("Only BJP Won:")
print(bjp_wins)

print("Only Congress Won:")
print(congress_wins)

print("Other Parties Won:")
print(other_party_wins)
```

```
Only BJP Won:
        Constituency  Const. No.         Leading Candidate  \
0              AJMER          13       BHAGIRATH CHOUDHARY
1              ALWAR           8         BHUPENDER YADAV
6           Adilabad           1              GODAM NAGESH
7               Agra          18      PROF S P SINGH BAGHEL
8      Ahmedabad East           7  HASMUKHBHAI PATEL (H.S.PATEL)
..               ...         ...                       ...
525          VIDISHA          18     SHIVRAJ SINGH CHOUHAN
529         Vadodara          20          DR. HEMANG JOSHI
532           Valsad          26   DHAVAL LAXMANBHAI PATEL
533         Varanasi          77            NARENDRA MODI
540       West Delhi           6         KAMALJEET SEHRAWAT

                Leading Party              Trailing Candidate  \
0      Bharatiya Janata Party         RAMCHANDRA CHOUDHARY
1      Bharatiya Janata Party                  LALIT YADAV
6      Bharatiya Janata Party               ATHRAM SUGUNA
7      Bharatiya Janata Party           SURESH CHAND KARDAM
```

In [ ]: