

✓ Data Analysis on Electoral Bonds

By Piyush Joshi

Importing and analysing the dataframe concerning Purchased Details

```
!wget https://www.eci.gov.in/eci-backend/public/api/download?url=LMAhAK6sOPBp%2FNFF0iRfXbEB1EVSLT41NNLRjYNJJP1KivrUxbfqkDatmHy12e%2FzBiU51zPFZI5qMtjV1qgjFmSC%2FSz9GPIId9Z1f4WX9G%
```

```
→ --2024-05-10 03:15:05-- https://www.eci.gov.in/eci-backend/public/api/download?url=LMAhAK6sOPBp%2FNFF0iRfXbEB1EVSLT41NNLRjYNJJP1KivrUxbfqkDatmHy12e%2FzBiU51zPFZI5qMtjV1qgjFm
Resolving www.eci.gov.in (www.eci.gov.in)... 23.53.35.46, 23.53.35.39
Connecting to www.eci.gov.in (www.eci.gov.in)|23.53.35.46|:443... connected.
HTTP request sent, awaiting response... 403 Forbidden
2024-05-10 03:15:05 ERROR 403: Forbidden.
```

```
#Since the download file in pdf format we will have to convert it into csv
!pip install tabula-py

import tabula

# Read the PDF and extract data
Table=tabula.read_pdf('Redemption_details.pdf', pages="all")

# Convert all pages to CSV
tabula.convert_into("Redemption_details.pdf", "Redemption_Details.csv", pages="all")

import pandas as pd
Piyush=pd.read_csv("Redemption_Details.csv")
Piyush.head(5)
```

```

Requirement already satisfied: tabula-py in /usr/local/lib/python3.10/dist-packages (2.9.0)
Requirement already satisfied: pandas>=0.25.3 in /usr/local/lib/python3.10/dist-packages (from tabula-py) (2.0.3)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from tabula-py) (1.25.2)
Requirement already satisfied: distro in /usr/lib/python3/dist-packages (from tabula-py) (1.7.0)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.10/dist-packages (from pandas>=0.25.3->tabula-py) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=0.25.3->tabula-py) (2023.4)
Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=0.25.3->tabula-py) (2024.1)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.8.2->pandas>=0.25.3->tabula-py) (1.16.0)
ERROR: Operation cancelled by user
WARNING:tabula.backend:Error importing jpype dependencies. Fallback to subprocess.
WARNING:tabula.backend:No module named 'jpype'
WARNING:tabula.backend:Got stderr: May 10, 2024 3:18:58 AM org.apache.pdfbox.pdmodel.font.FileSystemFontProvider loadDiskCache
WARNING: New fonts found, font cache will be re-built
May 10, 2024 3:18:58 AM org.apache.pdfbox.pdmodel.font.FileSystemFontProvider <init>
WARNING: Building on-disk font cache, this may take a while
May 10, 2024 3:18:58 AM org.apache.pdfbox.pdmodel.font.FileSystemFontProvider <init>
WARNING: Finished building on-disk font cache, found 17 fonts

```

Sr No.	Date of\Encashment	Name of the Political Party	Account no. of\rPolitical Party	Prefix	Bond\rNumber	Denominations	Pay Branch\rCode	Pay Teller
0 1	12/Apr/2019	ALL INDIA ANNA DRAVIDA MUNNETRA KAZHAGAM	*****5199	OC	775	1,00,00,000	00800	2770121
1 2	12/Apr/2019	ALL INDIA ANNA DRAVIDA MUNNETRA KAZHAGAM	*****5199	OC	3975	1,00,00,000	00800	2770121
2 3	12/Apr/2019	ALL INDIA ANNA DRAVIDA MUNNETRA KAZHAGAM	*****5199	OC	3967	1,00,00,000	00800	2770121
AI INDIA ANNA DRAVIDA MI INNFTRA								

```
Piyush.drop(["Sr No.", "Account no. of\rPolitical Party", "Pay Branch\rCode", "Pay Teller"], axis=1, inplace=True)
```

```
Piyush.info()
```

```

→ <class 'pandas.core.frame.DataFrame'>
RangeIndex: 20972 entries, 0 to 20971
Data columns (total 5 columns):
 #   Column           Non-Null Count  Dtype  
 ---  --  
 0   Encashment       20972 non-null   object 
 1   Name of the Political Party 20972 non-null   object 
 2   Prefix           20972 non-null   object 
 3   Number           20972 non-null   object 
 4   Denominations   20972 non-null   object 
dtypes: object(5)
memory usage: 819.3+ KB

```

```
Piyush.head(2)
```

	Date of\Encashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations
0	12/Apr/2019	ALL INDIA ANNA DRAVIDA MUNNETRA KAZHAGAM	OC	775	1,00,00,000
1	12/Apr/2019	ALL INDIA ANNA DRAVIDA MUNNETRA KAZHAGAM	OC	3975	1,00,00,000

```
#Importing and analysing the dataframe concerning Redumption Details
!wget https://www.eci.gov.in/eci-backend/public/api/download?url=LMAhAK6sOPBp%2FNFF0iRfXbEB1EVSLT41NNLRjYNJJP1KivrUxbfqkDatmHy12e%2FzBiU51zPFZI5qMtjV1qgjFmSC%2FSz9GPIId9Zlf4WX9G%:
→ --2024-05-10 03:24:05-- https://www.eci.gov.in/eci-backend/public/api/download?url=LMAhAK6sOPBp%2FNFF0iRfXbEB1EVSLT41NNLRjYNJJP1KivrUxbfqkDatmHy12e%2FzBiU51zPFZI5qMtjV1qgjFm
Resolving www.eci.gov.in (www.eci.gov.in)... 23.46.150.57, 23.46.150.73
Connecting to www.eci.gov.in (www.eci.gov.in)|23.46.150.57|:443... connected.
HTTP request sent, awaiting response... 403 Forbidden
2024-05-10 03:24:05 ERROR 403: Forbidden.
```

```
# Read the PDF and extract data
PD_Table=tabula.read_pdf('Purchase_details.pdf', pages="all")

# Convert all pages to CSV
tabula.convert_into("Purchase_details.pdf", "Purchase_Details.csv", pages="all")

import pandas as pd
Joshi=pd.read_csv("Purchase_Details.csv")

Joshi.head(2)
```

	Sr No.	Reference No (URN)	Journal Date	Date of\rPurchase	Date of Expiry	Name of the Purchaser	Prefix	Bond\rNumber	Denominations	Issue Branch Code	Issue Teller	Status
0	1	00001201904120000001166	12/Apr/2019	12/Apr/2019	26/Apr/2019	A B C INDIA LIMITED	TL	11448	10,00,000	00001	5899230	Paid
1	2	00001201904120000001166	12/Apr/2019	12/Apr/2019	26/Apr/2019	A B C INDIA LIMITED	TL	11447	10,00,000	00001	5899230	Paid

```
Joshi.drop(["Sr No.", "Date of Expiry", "Issue Branch Code", "Issue Teller", "Journal Date", "Prefix"], axis=1, inplace=True)
Joshi.info()
```

```
→ <class 'pandas.core.frame.DataFrame'>
RangeIndex: 19256 entries, 0 to 19255
Data columns (total 6 columns):
 #   Column           Non-Null Count  Dtype  
 ---  -- 
 0   Reference No (URN)    19256 non-null   object 
 Purchase          19256 non-null   object 
 2   Name of the Purchaser 19256 non-null   object 
 Number            19256 non-null   object 
 4   Denominations      19256 non-null   object 
 5   Status             19256 non-null   object 
 dtypes: object(6)
memory usage: 902.8+ KB
```

```
Joshi.head(2)
```

	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Bond\rNumber	Denominations	Status
0	00001201904120000001166	12/Apr/2019	A B C INDIA LIMITED	11448	10,00,000	Paid
1	00001201904120000001166	12/Apr/2019	A B C INDIA LIMITED	11447	10,00,000	Paid

```
#verifying whether Bond\rNumber is a primary key
Joshi["Bond\rNumber"].value_counts()
```

```
→ Bond\rNumber
Bond\rNumber    385
10009         4
10012         4
13902         3
13908         3
...
29575         1
29573         1
29585         1
29308         1
17803         1
Name: count, Length: 14492, dtype: int64
```

Established, out of 385 "Bond\rNumber" many have multiple entries. Also, there is no Reference No (URN) in Redemption_Details Table. In absence of unique key we will be merging the tables based on combination of columns ("Denominations" and ""Bond\rNumber") as a composite primary key.

```
merge_list = pd.merge(left=Piyush,
                      right=Joshi,
                      on=["Bond\rNumber", "Denominations"],
                      how='inner',
                      suffixes=('_left', '_right'))
```

```
merge_list
```

	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
0	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
1	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
2	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
3	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
4	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
...
230871	24/Jan/2024	JANASENA PARTY	TL	2619	10,00,000	00952202401100000003723	10/Jan/2024	VALLURUPALLI PRABHU KISHORE	Paid
230872	24/Jan/2024	JANASENA PARTY	TL	2608	10,00,000	00952202401100000003723	10/Jan/2024	VALLURUPALLI PRABHU KISHORE	Paid
230873	24/Jan/2024	JANASENA PARTY	TL	2633	10,00,000	00952202401100000003723	10/Jan/2024	VALLURUPALLI PRABHU KISHORE	Paid
230874	24/Jan/2024	JANASENA PARTY	TL	2627	10,00,000	00952202401100000003723	10/Jan/2024	VALLURUPALLI PRABHU KISHORE	Paid

```

Tidy_List=merge_list[merge_list["Prefix"]!="Prefix"]
Tidy_List["Denominations"] = Tidy_List["Denominations"].str.replace(","," ", regex=False)
Tidy_List["Denominations"] = Tidy_List["Denominations"].astype(int)

Tidy_List.head(5)

→ <ipython-input-13-1368e5bbc559>:2: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user\_guide/indexing.html#returning-a-view-versus-a-copy
Tidy_List["Denominations"] = Tidy_List["Denominations"].str.replace(","," ", regex=False)
<ipython-input-13-1368e5bbc559>:3: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user\_guide/indexing.html#returning-a-view-versus-a-copy
Tidy_List["Denominations"] = Tidy_List["Denominations"].astype(int)

```

	Date of\rEncashment	Name of the Political Party	Prefix	Bond\rNumber	Denominations	Reference No (URN)	Date of\rPurchase	Name of the Purchaser	Status
212135	16/Apr/2019	BHARATIYA JANATA PARTY	OC	5485	10000000	0084720190412000001164	12/Apr/2019	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	Paid
212136	16/Apr/2019	BHARATIYA JANATA PARTY	OC	5465	10000000	0084720190412000001164	12/Apr/2019	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	Paid
212137	16/Apr/2019	BHARATIYA JANATA PARTY	OC	5497	10000000	0084720190412000001164	12/Apr/2019	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	Paid
212138	16/Apr/2019	BHARATIYA JANATA PARTY	OC	5510	10000000	0084720190412000001164	12/Apr/2019	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	Paid
212139	16/Apr/2019	BHARATIYA JANATA PARTY	OC	5484	10000000	0084720190412000001164	12/Apr/2019	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	Paid

Party-wise collection of funds through electoral bonds

```

Donation_spread=Tidy_List.groupby("Name of the Political Party")["Denominations"].sum().sort_values(ascending=False)
Donation_spread

```

→ Name of the Political Party	
BHARATIYA JANATA PARTY	55942011000
ALL INDIA TRINAMOOL CONGRESS	15925214000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE	13510945000
BHARAT RASHTRA SAMITHI	11911599000
BIJU JANATA DAL	7755000000
DRAVIDA MUNNETRA KAZHAGAM (DMK)	6320000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)	3287500000
TELUGU DESAM PARTY	2115800000
SHIVSENA	1524514000
RASHTRIYA JANTA DAL	725000000
AAM Aadmi Party	652500000
JANATA DAL (SECULAR)	410000000
SIKKIM KRANTIKARI MORCHA	365000000
NATIONALIST CONGRESS PARTY MAHARASHTRA PRADESH	285000000

```
JANASENA PARTY                                210000000
ADYAKSHA SAMAJVADI PARTY                      132100000
JHARKHAND MUKTI MORCHA                       125000000
BIHAR PRADESH JANTA DAL(UNITED)                120000000
SHIROMANI AKALI DAL                           72600000
SIKKIM DEMOCRATIC FRONT                        55000000
MAHARASHTRAWADI GOMNTAK PARTY                  5500000
JAMMU AND KASHMIR NATIONAL CONFERENCE          5000000
GOA FORWARD PARTY                             3500000
Name: Denominations, dtype: int64
```

Total value of electoral bonds

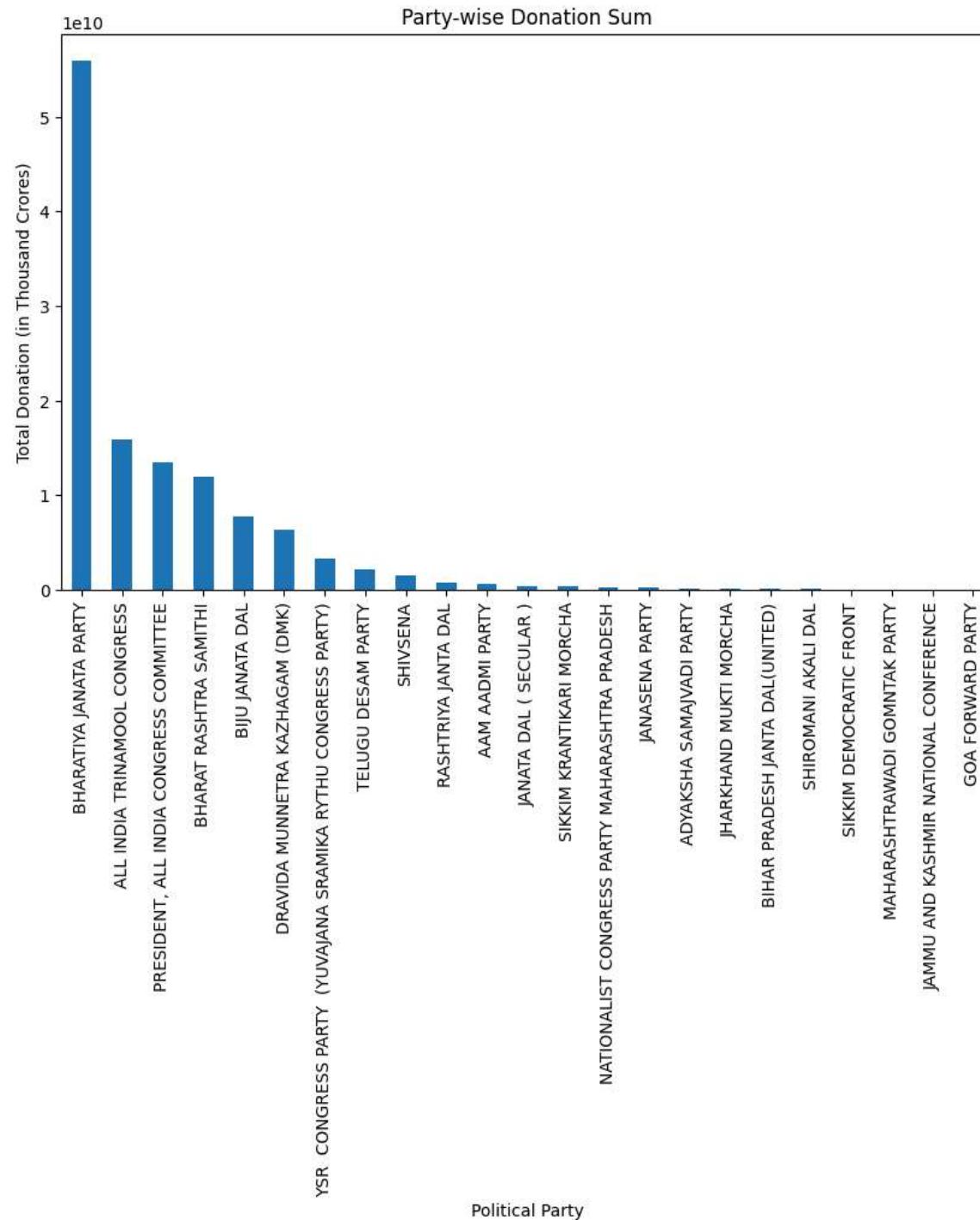
```
Donation_spread.sum()
```

```
→ 121458783000
```

Start coding or [generate](#) with AI.

```
import matplotlib.pyplot as plt
Donation_spread.sort_values(ascending=False).plot(kind="bar", figsize=(10, 6))
plt.title("Party-wise Donation Sum")
plt.xlabel("Political Party")
plt.ylabel("Total Donation (in Thousand Crores)")
plt.show()
```

[▼]



Funds received by political parties in percentage

```
Donation_in_percentage=Donation_spread.to_frame().reset_index()
Donation_in_percentage.rename(columns={'Denominations': 'Amount_recieved'}, inplace=True)
Donation_in_percentage["Percentage share"] = Donation_in_percentage["Amount_recieved"]*100/Donation_spread.sum()
Donation_in_percentage
```

	Name of the Political Party	Amount_recieved	Percentage share
0	BHARATIYA JANATA PARTY	55942011000	46.058432
1	ALL INDIA TRINAMOOL CONGRESS	15925214000	13.111620
2	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	13510945000	11.123893
3	BHARAT RASHTRA SAMITHI	11911599000	9.807112
4	BIJU JANATA DAL	7755000000	6.384882
5	DRAVIDA MUNNETRA KAZHAGAM (DMK)	6320000000	5.203411
6	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	3287500000	2.706680
7	TELUGU DESAM PARTY	2115800000	1.741990
8	SHIVSENA	1524514000	1.255170
9	RASHTRIYA JANTA DAL	725000000	0.596910
10	AAM AADMI PARTY	652500000	0.537219
11	JANATA DAL (SECULAR)	410000000	0.337563
12	SIKKIM KRANTIKARI MORCHA	365000000	0.300513
13	NATIONALIST CONGRESS PARTY MAHARASHTRA PRADESH	285000000	0.234648
14	JANASENA PARTY	210000000	0.172898
15	ADYAKSHA SAMAJVADI PARTY	132100000	0.108761
16	JHARKHAND MUKTI MORCHA	125000000	0.102916
17	BIHAR PRADESH JANTA DAL(UNITED)	120000000	0.098799
18	SHIROMANI AKALI DAL	72600000	0.059773
19	SIKKIM DEMOCRATIC FRONT	55000000	0.045283
20	MAHARASHTRAWADI GOMNTAK PARTY	5500000	0.004528
21	JAMMU AND KASHMIR NATIONAL CONFERENCE	5000000	0.004117
22	GOA FORWARD PARTY	3500000	0.002882

Donation_spread

Name of the Political Party	
BHARATIYA JANATA PARTY	55942011000
ALL INDIA TRINAMOOL CONGRESS	15925214000

```
PRESIDENT, ALL INDIA CONGRESS COMMITTEE 13510945000
BHARAT RASHTRA SAMITHI 11911599000
BIJU JANATA DAL 7755000000
DRAVIDA MUNNETRA KAZHAGAM (DMK) 6320000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY) 3287500000
TELUGU DESAM PARTY 2115800000
SHIVSENA 1524514000
RASHTRIYA JANTA DAL 725000000
AAM AADMI PARTY 652500000
JANATA DAL ( SECULAR ) 410000000
SIKKIM KRANTIKARI MORCHA 365000000
NATIONALIST CONGRESS PARTY MAHARASHTRA PRADESH 285000000
JANASENA PARTY 210000000
ADYAKSHA SAMAJVADI PARTY 132100000
JHARKHAND MUKTI MORCHA 125000000
BIHAR PRADESH JANTA DAL(UNITED) 120000000
SHIROMANI AKALI DAL 726000000
SIKKIM DEMOCRATIC FRONT 55000000
MAHARASHTRAWADI GOMNTAK PARTY 5500000
JAMMU AND KASHMIR NATIONAL CONFERENCE 5000000
GOA FORWARD PARTY 3500000
Name: Denominations, dtype: int64
```

```
Others=Donation_spread[3: ].sum()
Others
```

```
→ 36080613000
```

```
Top3=Donation_spread[0:3]
Top3
```

```
→ Name of the Political Party
BHARATIYA JANATA PARTY 55942011000
ALL INDIA TRINAMOOL CONGRESS 15925214000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE 13510945000
Name: Denominations, dtype: int64
```

```
Others = pd.Series(Others)
Others.index = ['Others']
updated_series = pd.concat([Top3, Others], ignore_index=False)
updated_series
```

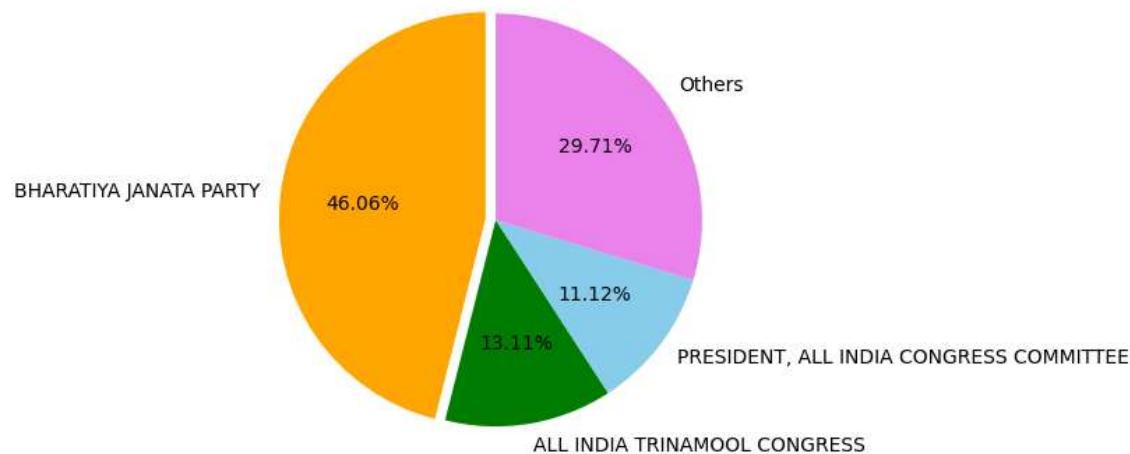
```
→ BHARATIYA JANATA PARTY 55942011000
    ALL INDIA TRINAMOOL CONGRESS 15925214000
    PRESIDENT, ALL INDIA CONGRESS COMMITTEE 13510945000
    Others 36080613000
    dtype: int64
```

```
plt.pie(updated_series, labels=updated_series.index,startangle=90,
         autopct=".2f%%",explode=(0.05,0,0,0),
         colors=['orange','green', 'skyblue', 'violet'])
plt.title("Party-wise Donation Spread in percentage")
plt.figure(figsize=(8, 6))

plt.show()
```



Party-wise Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

Insight:

- Total 121458783000/- worth ruppes of electoral bonds were purchased by political parties in a span of 4 years
- Despite being in Centre and forming government in almost 55% of the state BJP received 46% of total electoral bonds and rest is shared by other political parties.

Reccomendations:

- Electoral bonds were brought in as a means to curb black money in Indian politics, it was a necessary step as for in a span of mere 4 years 12,000 Crore of money came in political donations, this amount of black money would have been harmful for the state of Indian economy.
- Supreme Court quashing electoral bonds as policy could have been avoidable, it surely brought in dubious political donations in lieu of anonymity w.r.t crony capitalism but such a step is akin to cut the nose to spite the face.

Start coding or [generate](#) with AI.

Top 10 Benefactors across Political Parties

```
Donation_spread_across_benefactors=Tidy_List.groupby(["Name of the Political Party","Name of the Purchaser"])[["Denominations"]].sum().sort_values(ascending=False).to_frame().reset_index()
Donation_spread_across_benefactors.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
Donation_spread_across_benefactors.head(10)
```



Name of the Political Party

Name of the Purchaser

Amount_recieved



0	BHARATIYA JANATA PARTY	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	5190000000
1	DRAVIDA MUNNETRA KAZHAGAM (DMK)	FUTURE GAMING AND HOTEL SERVICES PR	4530000000
2	ALL INDIA TRINAMOOL CONGRESS	FUTURE GAMING AND HOTEL SERVICES PR	4350000000
3	BHARATIYA JANATA PARTY	QWIKSUPPLYCHAINPRIVATELIMITED	3750000000
4	ALL INDIA TRINAMOOL CONGRESS	HALDIA ENERGY LIMITED	2810000000
5	BHARATIYA JANATA PARTY	VEDANTA LIMITED	2266500000
6	BHARATIYA JANATA PARTY	BHARTI AIRTEL LIMITED	1830000000
7	BHARATIYA JANATA PARTY	MADANLAL LTD.	1755000000
8	BIJU JANATA DAL	ESSEL MINING AND INDS LTD	1745000000
9	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	FUTURE GAMING AND HOTEL SERVICES PR	1540000000

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

Top 10 Benefactors of BHARATIYA JANATA PARTY

```
BJP=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="BHARATIYA JANATA PARTY"].head(10)
BJP.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
BJP
```



Name of the Political Party

Name of the Purchaser

Amount_recieved



0	BHARATIYA JANATA PARTY	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	5190000000
3	BHARATIYA JANATA PARTY	QWIKSUPPLYCHAINPRIVATELIMITED	3750000000
5	BHARATIYA JANATA PARTY	VEDANTA LIMITED	2266500000
6	BHARATIYA JANATA PARTY	BHARTI AIRTEL LIMITED	1830000000
7	BHARATIYA JANATA PARTY	MADANLAL LTD.	1755000000
11	BHARATIYA JANATA PARTY	KEVENTER FOODPARK INFRA LIMITED	1445000000
12	BHARATIYA JANATA PARTY	DLF COMMERCIAL DEVELOPERS LIMITED	1300000000
14	BHARATIYA JANATA PARTY	BIRLA CARBON INDIA PRIVATELIMITED	1050000000
16	BHARATIYA JANATA PARTY	FUTURE GAMING AND HOTEL SERVICES PR	1000000000
21	BHARATIYA JANATA PARTY	HALDIA ENERGY LIMITED	810000000

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

Top 10 Benefactors of Indian National Congress Party

```
INC=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="PRESIDENT, ALL INDIA CONGRESS COMMITTEE"].head(10)
```

```
INC.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
INC
```

	Name of the Political Party	Name of the Purchaser	Amount_recieved	
13	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	WESTERN UP POWER TRANSMISSION COMPANY LI MITED	1100000000	
15	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	VEDANTA LIMITED	1040000000	
24	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	MKJ ENTERPRISES LIMITED	693500000	
25	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	YASHODA SUPER SPECIALITY HOSPITAL	640000000	
33	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	AVEES TRADING FINANCE PVT LTD	530000000	
37	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	FUTURE GAMING AND HOTEL SERVICES PR	500000000	
55	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	SASMAL INFRASTRUCTURE PRIVATE LIMITED	390000000	
76	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	RITHWIK PROJECTS PRIVATE LIMITED	300000000	
77	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	SEPC POWER PVT LTD OPERATION RETEN	300000000	
103	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	MKJ ENTERPRISES LTD	222500000	

Next steps: [Generate code with INC](#)

[View recommended plots](#)

Top 10 Benefactors of ALL INDIA TRINAMOOL CONGRESS

```
TMC=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="ALL INDIA TRINAMOOL CONGRESS"].head(10)
TMC.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
TMC
```

	Name of the Political Party	Name of the Purchaser	Amount_recieved	
2	ALL INDIA TRINAMOOL CONGRESS	FUTURE GAMING AND HOTEL SERVICES PR	4350000000	
4	ALL INDIA TRINAMOOL CONGRESS	HALDIA ENERGY LIMITED	2810000000	
19	ALL INDIA TRINAMOOL CONGRESS	DHARIWAL INFRASTRUCTURE LIMITED	900000000	
26	ALL INDIA TRINAMOOL CONGRESS	FUTURE GAMING AND HOTEL SERVICES PVT LTD	620000000	
42	ALL INDIA TRINAMOOL CONGRESS	FUTURE GAMING AND HOTEL SERVICES PRIVATE LIMITED	450000000	
47	ALL INDIA TRINAMOOL CONGRESS	IFB AGRO INDUSTRIES LIMITED	420000000	
48	ALL INDIA TRINAMOOL CONGRESS	PCBL LIMITED	400000000	
52	ALL INDIA TRINAMOOL CONGRESS	CHENNAI GREEN WOODS PRIVATE LIMITED	400000000	
56	ALL INDIA TRINAMOOL CONGRESS	PRARAMBH SECURITIES PVT LTDPROPRIET	380000000	
64	ALL INDIA TRINAMOOL CONGRESS	CRESCENT POWER LTD	330000000	

Next steps: [Generate code with TMC](#)

[View recommended plots](#)

Top 10 Benefactors of BHARAT RASHTRA SAMITHI

```
BRS=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="BHARAT RASHTRA SAMITHI"].head(10)
BRS.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
BRS
```

	Name of the Political Party	Name of the Purchaser	Amount_recieved	
10	BHARAT RASHTRA SAMITHI	MEGHA ENGINEERING AND INFRASTRUCTURES LTD	1500000000	
18	BHARAT RASHTRA SAMITHI	YASHODA SUPER SPECIALITY HOSPITAL	940000000	
34	BHARAT RASHTRA SAMITHI	CHENNAI GREEN WOODS PRIVATE LIMITED	500000000	
45	BHARAT RASHTRA SAMITHI	MEGHA ENGINEERING & INFRASTRUCTURES LIMITED	450000000	
67	BHARAT RASHTRA SAMITHI	DR.REDDY'S LABORATORIES LTD	320000000	
70	BHARAT RASHTRA SAMITHI	HETERO DRUGS LIMITED	300000000	
93	BHARAT RASHTRA SAMITHI	IRB MP EXPRESSWAY PRIVATE LIMITED	250000000	
105	BHARAT RASHTRA SAMITHI	L7 HITECH PRIVATE LIMITED	220000000	
108	BHARAT RASHTRA SAMITHI	KOYA AND COMPANY CONSTRUCTION LTD	200000000	
112	BHARAT RASHTRA SAMITHI	TELLAPUR TECHNOCITY PRIVATE LTD	200000000	

Next steps: [Generate code with BRS](#)

[View recommended plots](#)

Top 10 Benefactors of BIJU JANATA DAL

```
BJD=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="BIJU JANATA DAL"].head(10)
BJD.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
BJD
```

	Name of the Political Party	Name of the Purchaser	Amount_recieved	
8	BIJU JANATA DAL	ESSEL MINING AND IND LTD	1745000000	
17	BIJU JANATA DAL	JINDAL STEEL AND POWER LIMITED	1000000000	
28	BIJU JANATA DAL	UTKAL ALUMINA INTERNATIONAL LIMITED	600000000	
40	BIJU JANATA DAL	RUNGTA SONS P LTD	500000000	
43	BIJU JANATA DAL	RASHMI CEMENT LTD	450000000	
44	BIJU JANATA DAL	MS S N MOHANTY	450000000	
50	BIJU JANATA DAL	VEDANTA LIMITED	400000000	
75	BIJU JANATA DAL	JINDAL STAINLESS LTD	300000000	
80	BIJU JANATA DAL	PENGUIN TRADING & AGENCIES LIMITED	275000000	
83	BIJU JANATA DAL	RASHMI METALIKS LTD	270000000	

Next steps: [Generate code with BJD](#)

[View recommended plots](#)

Top 10 Benefactors of DRAVIDA MUNNETRA KAZHAGAM (DMK)

```
DMK=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="DRAVIDA MUNNETRA KAZHAGAM (DMK)"].head(10)
DMK.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
DMK
```

	Name of the Political Party	Name of the Purchaser	Amount_recieved	
1	DRAVIDA MUNNETRA KAZHAGAM (DMK)	FUTURE GAMING AND HOTEL SERVICES PR	4530000000	
30	DRAVIDA MUNNETRA KAZHAGAM (DMK)	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	600000000	
38	DRAVIDA MUNNETRA KAZHAGAM (DMK)	FUTURE GAMING AND HOTEL SERVICES PRIVATE LIMITED	500000000	
96	DRAVIDA MUNNETRA KAZHAGAM (DMK)	MEGHA ENGINEERING & INFRASTRUCTURES LIMITED	250000000	
296	DRAVIDA MUNNETRA KAZHAGAM (DMK)	WESTWELL GASES PRIVATE LIMITED	80000000	
316	DRAVIDA MUNNETRA KAZHAGAM (DMK)	ASKUS LOGISTICS PVT LTD	70000000	
362	DRAVIDA MUNNETRA KAZHAGAM (DMK)	FERTILELAND FOODS PRIVATE LIMITED	50000000	
498	DRAVIDA MUNNETRA KAZHAGAM (DMK)	HERALD BEVERAGES PRIVATE LIMITED	40000000	
501	DRAVIDA MUNNETRA KAZHAGAM (DMK)	THE INDIA CEMENTS LTD	40000000	
526	DRAVIDA MUNNETRA KAZHAGAM (DMK)	KAL RADIO LIMITED	35000000	

Next steps: [Generate code with DMK](#)

[View recommended plots](#)

Top 10 Benefactors of YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)

```
YSR=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)"].head(10)
YSR.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
YSR
```



Name of the Political Party

Name of the Purchaser

Amount_recieived



9	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	FUTURE GAMING AND HOTEL SERVICES PR	1540000000
57	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	370000000
98	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	THE RAMCO CEMENTS LIMITED	240000000
143	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	OSTRO MADHYA WIND PRIVATE LIMITED	170000000
145	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	OSTRO JAISALMER PRIVATE LIMITED	170000000
208	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	SNEHA KINETIC POWER PROJECTS PVT LTD	100000000
358	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	EVERSHINE INTERIORS CHENNAI PVT LTD	50000000
361	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	GREENKO ANANTAPUR WIND POWER PRIVATE LIMITED	50000000
392	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	FUTURISTIC HANDLING SERVICES PVT LTD	50000000
456	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	SKEIRON RENEWABLE ENERGY AMIDYALA PRIVATE LIMITED	50000000

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

Top 10 Benefactors of TELUGU DESAM PARTY

```
TDP=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="TELUGU DESAM PARTY"].head(10)
TDP.rename(columns={'Denominations': 'Amount_recieived'},inplace=True)
TDP
```



Name of the Political Party

Name of the Purchaser

Amount_recieived



53	TELUGU DESAM PARTY	SHIRDI SAI ELECTRICALS LTD	400000000
79	TELUGU DESAM PARTY	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	280000000
121	TELUGU DESAM PARTY	WESTERN UP POWER TRANSMISSION COMPANY LI MITED	200000000
179	TELUGU DESAM PARTY	NATCO PHARMA LTD	140000000
262	TELUGU DESAM PARTY	DR.REDDY'S LABORATORIES LTD	100000000
265	TELUGU DESAM PARTY	BHARAT BIOTECH INTERNATIONAL LIMITED	100000000
402	TELUGU DESAM PARTY	THE RAMCO CEMENTS LIMITED	50000000
410	TELUGU DESAM PARTY	TRIDENTCHEMPHARLIMITED	50000000
444	TELUGU DESAM PARTY	BIOVET PVT LTD	50000000
445	TELUGU DESAM PARTY	MAATHA PROJECTS LLP	50000000

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

Top 10 Benefactors of SHIVSENA

```

SS=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="SHIVSENA"].head(10)
SS.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
SS

```

	Name of the Political Party	Name of the Purchaser	Amount_recieved
20	SHIVSENA	B G SHIRKE CONSTRUCTION TECHNOLOGY PVT L TD	850000000
88	SHIVSENA	QWIKSUPPLYCHAINPRIVATELIMITED	250000000
408	SHIVSENA	PRL DEVELOPERS PRIVATE LIMITED	50000000
549	SHIVSENA	YUVAN TRADING CONSULTANCY LLP	30000000
551	SHIVSENA	ULTRA TECH CEMENT LIMITED	30000000
552	SHIVSENA	TORRENT POWER LIMITED	30000000
609	SHIVSENA	GENEXT HARDWARE PARKS PVT. LTD	30000000
614	SHIVSENA	DINESHCHANDRA R AGRAWAL INFRACON PVT LTD	30000000
652	SHIVSENA	MAHALAXMI VIDYUT PVT.LTD.	25000000
695	SHIVSENA	BIRLAESTATESPRIVATELIMITED	20000000

Top 10 Benefactors of RASHTRIYA JANTA DAL

```

RJD=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="RASHTRIYA JANTA DAL"].head(10)
RJD.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
RJD

```

	Name of the Political Party	Name of the Purchaser	Amount_recieved
61	RASHTRIYA JANTA DAL	IFB AGRO INDUSTRIES LIMITED	350000000
282	RASHTRIYA JANTA DAL	ASKUS LOGISTICS PRIVATE LIMITED	90000000
348	RASHTRIYA JANTA DAL	WESTWELL GASES PRIVATE LIMITED	51000000
531	RASHTRIYA JANTA DAL	RAUNAK GUPTA	35000000
640	RASHTRIYA JANTA DAL	PURULIA BOTTLING PVT LTD	25000000
661	RASHTRIYA JANTA DAL	LAXMI INDUSTRIAL BOTTLING PLANT	24400000
716	RASHTRIYA JANTA DAL	SANDEEP AUTO LINES	20000000
732	RASHTRIYA JANTA DAL	HERALD BEVERAGES PRIVATE LIMITED	20000000
810	RASHTRIYA JANTA DAL	VIKAS PARASRAMPURIA	15000000
821	RASHTRIYA JANTA DAL	MAHABIR BANKA	15000000

Top 10 Benefactors of AAM Aadmi Party

```

AAP=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="AAM AADMI PARTY"].head(10)
AAP.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
AAP

```

	Name of the Political Party	Name of the Purchaser	Amount_recieved
222	AAM AADMI PARTY	AVEES TRADING FINANCE PVT LTD	100000000
289	AAM AADMI PARTY	BAJAJ AUTO LTD	80000000
303	AAM AADMI PARTY	TRANSWAYS EXIM PRIVATE LIMITED	70000000
317	AAM AADMI PARTY	MKJ ENTERPRISES LIMITED	70000000
416	AAM AADMI PARTY	TORRENT POWER LIMITED	50000000
433	AAM AADMI PARTY	ASIAN TRADING CORPORATION LIMITED	50000000
507	AAM AADMI PARTY	IFB AGRO INDUSTRIES LIMITED	40000000
751	AAM AADMI PARTY	TORRENT POWER LTD	20000000
753	AAM AADMI PARTY	BIRD WORLDWIDE FLIGHT SERVICES INDI	20000000
826	AAM AADMI PARTY	AVON CYCLES LTD	14000000

Top 10 Benefactors of SAMAJVADI PARTY

```

SP=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Political Party"]=="ADYAKSHA SAMAJVADI PARTY"].head(10)
SP.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
SP

```

	Name of the Political Party	Name of the Purchaser	Amount_recieved
258	ADYAKSHA SAMAJVADI PARTY	KEVENTER FOODPARK INFRA LIMITED	100000000
571	ADYAKSHA SAMAJVADI PARTY	TORRENT PHARMACEUTICALS LTD	30000000
1291	ADYAKSHA SAMAJVADI PARTY	M S JUGENDRA SINGH AND COMPANY	2100000

Top 5 benefactors and their beneficiaries

MEGHA ENGINEERING AND INFRASTRUCTURES LIMITED

```

df=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Purchaser"]=="MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED"]

Purchaser1= df.groupby(["Name of the Purchaser","Name of the Political Party"])["Amount_recieved"].sum().sort_values(ascending=False).to_frame().reset_index()
Purchaser1.head(5)

```

→ Name of the Purchaser Name of the Political Party Amount_recieved

0 MEGA ENGINEERING AND INFRASTRUCTURES LI MITED	BHARATIYA JANATA PARTY	5190000000
1 MEGA ENGINEERING AND INFRASTRUCTURES LI MITED	BHARAT RASHTRA SAMITHI	1500000000
2 MEGA ENGINEERING AND INFRASTRUCTURES LI MITED	DRAVIDA MUNNETRA KAZHAGAM (DMK)	600000000
3 MEGA ENGINEERING AND INFRASTRUCTURES LI MITED	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	370000000
4 MEGA ENGINEERING AND INFRASTRUCTURES LI MITED	TELUGU DESAM PARTY	280000000

Next steps: [Generate code with Purchaser1](#)

[View recommended plots](#)

```
p1 = Purchaser1[["Name of the Political Party", "Amount_recieved"]].set_index("Name of the Political Party")
p1
```

→ Amount_recieved Name of the Political Party

Name of the Political Party	Amount_recieved
BHARATIYA JANATA PARTY	5190000000
BHARAT RASHTRA SAMITHI	1500000000
DRAVIDA MUNNETRA KAZHAGAM (DMK)	600000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)	370000000
TELUGU DESAM PARTY	280000000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE	180000000
JANATA DAL (SECULAR)	50000000
JANASENA PARTY	40000000

Next steps: [Generate code with p1](#)

[View recommended plots](#)

```
Others_ME=p1[3: ].sum()
```

```
Others_ME
```

→ Amount_recieved 920000000
dtype: int64

```
Top3_ME=p1[0:3]
```

```
Top3_ME=Top3_ME.squeeze()
```

```
Others_ME = pd.Series(Others_ME)
Others_ME.index = ['Others']
Others_ME
```

→ Others 920000000
dtype: int64

```

updated_series_ME = pd.concat([Top3_ME, Others_ME], ignore_index=False)

updated_series_ME

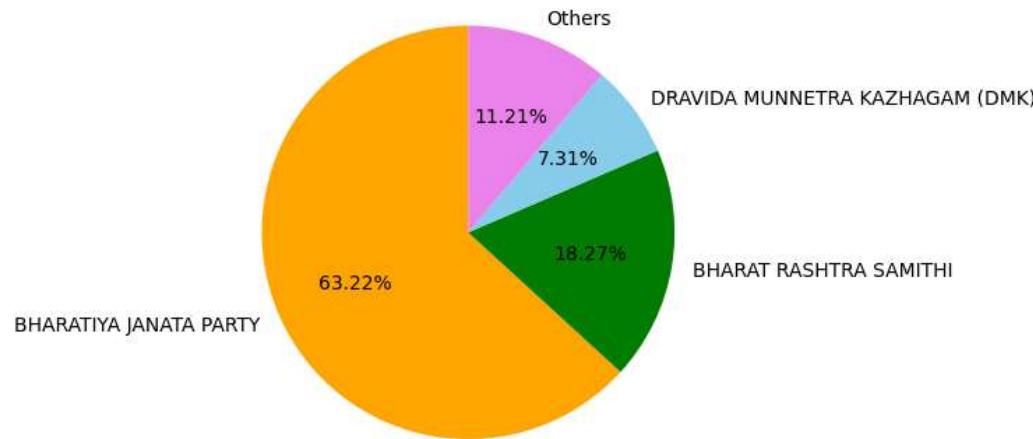
→ BHARATIYA JANATA PARTY      5190000000
   BHARAT RASHTRA SAMITHI     1500000000
   DRAVIDA MUNNETRA KAZHAGAM (DMK) 600000000
   Others                      920000000
   dtype: int64

import matplotlib.pyplot as plt
# Plot the pie chart
plt.pie(updated_series_ME, labels=updated_series_ME.index, autopct="% .2f%%",
         startangle=90, colors=['orange', 'green', 'skyblue', 'violet'])
plt.title("MEGHA ENGINEERING AND INFRASTRUCTURES LIMITED Donation Spread in percentage")
plt.figure(figsize=(8, 6))

plt.show()

```

→ MEGHA ENGINEERING AND INFRASTRUCTURES LIMITED Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

Double-click (or enter) to edit

FUTURE GAMING AND HOTEL SERVICES PR

```

df2=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Purchaser"]=="FUTURE GAMING AND HOTEL SERVICES PR"]
Purchaser2= df2.groupby(["Name of the Purchaser","Name of the Political Party"])["Amount_recieved"].sum().sort_values(ascending=False).to_frame().reset_index()
Purchaser2.head(5)

```

	Name of the Purchaser	Name of the Political Party	Amount_recieved	
0	FUTURE GAMING AND HOTEL SERVICES PR	DRAVIDA MUNNETRA KAZHAGAM (DMK)	4530000000	
1	FUTURE GAMING AND HOTEL SERVICES PR	ALL INDIA TRINAMOOL CONGRESS	4350000000	
2	FUTURE GAMING AND HOTEL SERVICES PR	YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU C...	1540000000	
3	FUTURE GAMING AND HOTEL SERVICES PR	BHARATIYA JANATA PARTY	1000000000	
4	FUTURE GAMING AND HOTEL SERVICES PR	PRESIDENT, ALL INDIA CONGRESS COMMITTEE	5000000000	

Next steps: [Generate code with Purchaser2](#)

[View recommended plots](#)

```
p2 = Purchaser2[["Name of the Political Party", "Amount_recieved"]].set_index("Name of the Political Party")
p2=p2.squeeze()
p2
```

Name of the Political Party	Amount_recieved
DRAVIDA MUNNETRA KAZHAGAM (DMK)	4530000000
ALL INDIA TRINAMOOL CONGRESS	4350000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)	1540000000
BHARATIYA JANATA PARTY	1000000000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE	5000000000
SIKKIM KRANTIKARI MORCHA	80000000
SIKKIM DEMOCRATIC FRONT	50000000
Name: Amount_recieved, dtype: int64	

```
Others_FG=p2[3:].sum()
Others_FG = pd.Series(Others_FG)
Others_FG.index = ['Others']
Others_FG
```

Others	1630000000
	dtype: int64

```
Top3_FG=p2[0:3]
Top3_FG
```

Name of the Political Party	Amount_recieved
DRAVIDA MUNNETRA KAZHAGAM (DMK)	4530000000
ALL INDIA TRINAMOOL CONGRESS	4350000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)	1540000000
Name: Amount_recieved, dtype: int64	

```
updated_series_FG = pd.concat([Top3_FG, Others_FG], ignore_index=False)
```

```
updated_series_FG
```

	Amount_recieved
DRAVIDA MUNNETRA KAZHAGAM (DMK)	4530000000
ALL INDIA TRINAMOOL CONGRESS	4350000000
YSR CONGRESS PARTY (YUVAJANA SRAMIKA RYTHU CONGRESS PARTY)	1540000000
Others	1630000000
Name: Amount_recieved, dtype: int64	

```

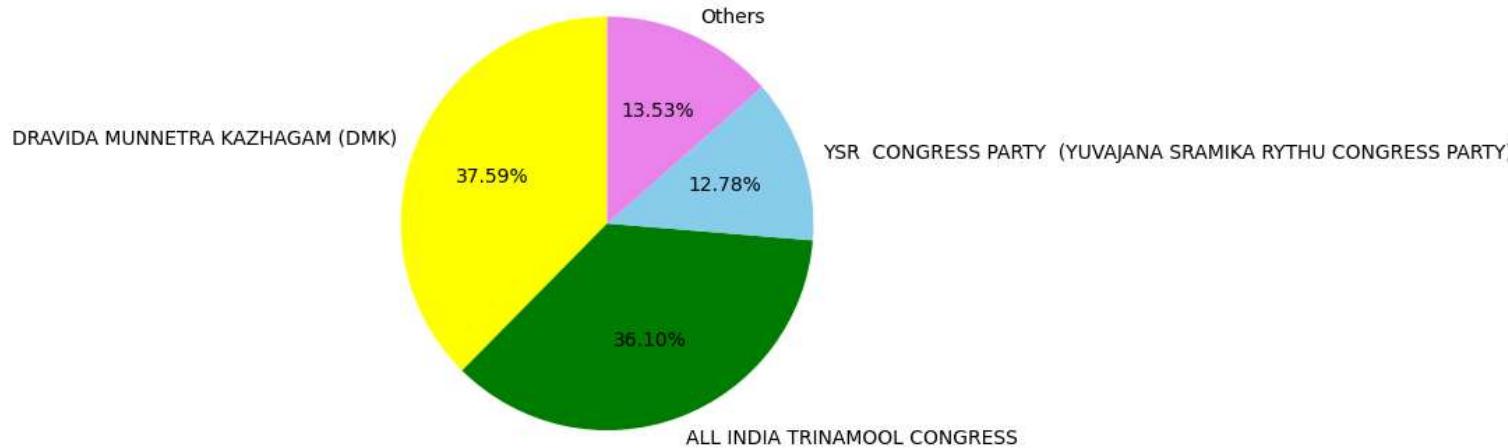
plt.pie(updated_series_FG, labels=updated_series_FG.index, autopct=".2f%%",
         startangle=90, colors=['yellow', 'green', 'skyblue', 'violet'])
plt.title("FUTURE GAMING AND HOTEL SERVICES PR Donation Spread in percentage")
plt.show() # Add this line to display the pie chart
plt.figure(figsize=(8, 6))

plt.show()

```



FUTURE GAMING AND HOTEL SERVICES PR Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

QWIK SUPPLY CHAIN PRIVATE LIMITED

```

df3=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Purchaser"]=="QWIKSUPPLYCHAINPRIVATELIMITED"]
Purchaser3= df3.groupby(["Name of the Purchaser","Name of the Political Party"])["Amount_recieved"].sum().sort_values(ascending=False).to_frame().reset_index()
p3 = Purchaser3[["Name of the Political Party", "Amount_recieved"]].set_index("Name of the Political Party")
p3

```



Amount_recieved

Name of the Political Party

BHARATIYA JANATA PARTY	3750000000
SHIVSENA	250000000
NATIONALIST CONGRESS PARTY MAHARASHTRA PRADESH	100000000

```

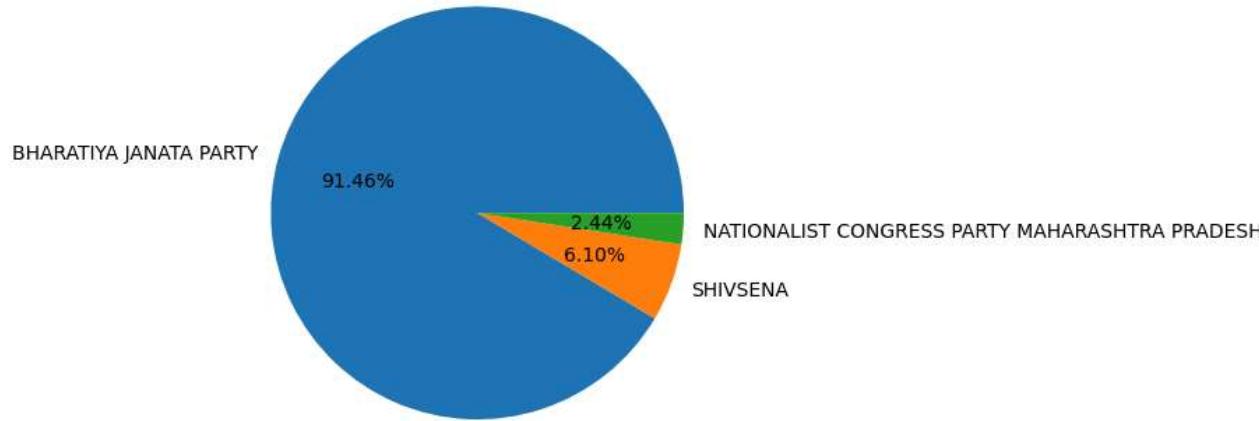
# Extract the first column of the DataFrame
values = p3.iloc[:, 0]

# Plot the pie chart
plt.pie(values, labels=p3.index, autopct=".2f%%")
plt.title("QWIK SUPPLY CHAIN PRIVATE LIMITED Donation Spread in percentage")
plt.figure(figsize=(8, 6))

plt.show()

```

⤓ QWIK SUPPLY CHAIN PRIVATE LIMITED Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

HALDIA ENERGY LIMITED

```

df4=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Purchaser"]=="HALDIA ENERGY LIMITED"]
Purchaser4= df4.groupby(["Name of the Purchaser","Name of the Political Party"])["Amount_recieved"].sum().sort_values(ascending=False).to_frame().reset_index()
p4 = Purchaser4[["Name of the Political Party", "Amount_recieved"]].set_index("Name of the Political Party")
p4

```

⤓ Amount_recieved

Name of the Political Party	Amount_recieved
ALL INDIA TRINAMOOL CONGRESS	2810000000
BHARATIYA JANATA PARTY	810000000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE	150000000

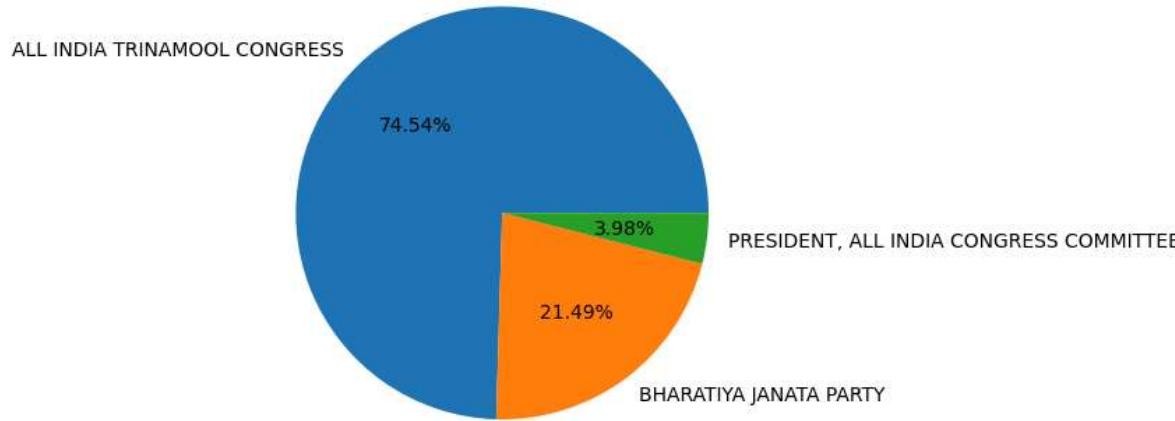
```
# Extract the first column of the DataFrame
values = p4.iloc[:, 0]

# Plot the pie chart
plt.pie(values, labels=p4.index, autopct=".2f%%")
plt.title("HALDIA ENERGY LIMITED Donation Spread in percentage")
plt.figure(figsize=(8, 6))

plt.show()
```

⤵

HALDIA ENERGY LIMITED Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

VEDANTA LIMITED

```
df5=Donation_spread_across_benefactors[Donation_spread_across_benefactors["Name of the Purchaser"]=="VEDANTA LIMITED"]
Purchaser5= df5.groupby(["Name of the Purchaser", "Name of the Political Party"])["Amount_recieved"].sum().sort_values(ascending=False).to_frame().reset_index()
p5 = Purchaser5[["Name of the Political Party", "Amount_recieved"]].set_index("Name of the Political Party")
```

⤵

Amount_recieved

Name of the Political Party	Amount_recieved
BHARATIYA JANATA PARTY	2266500000
PRESIDENT, ALL INDIA CONGRESS COMMITTEE	1040000000
BIJU JANATA DAL	400000000
JHARKHAND MUKTI MORCHA	50000000

```

# Extract the first column of the DataFrame
values = p5.iloc[:, 0]

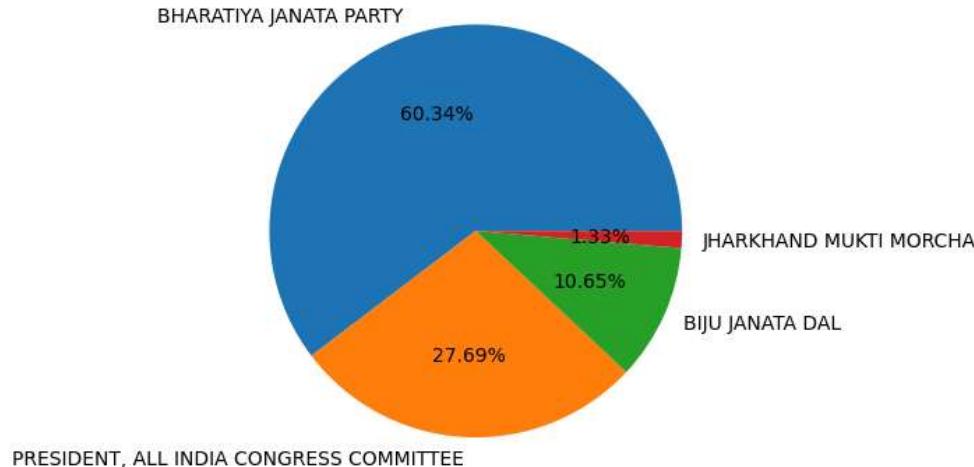
# Plot the pie chart
plt.pie(values, labels=p5.index, autopct=".2f%%")
plt.title("VEDANTA LIMITED Donation Spread in percentage")
plt.figure(figsize=(8, 6))

plt.show()

```



VEDANTA LIMITED Donation Spread in percentage



<Figure size 800x600 with 0 Axes>

Insights:

1. BJP continues to get major share from all the donors. In states where BJP has minimal presence as opposition, BJP get a percentage share of electoral bonds.
2. Donors have a tendency to donate all sides, it not only gives succour to opposition but implies guilt on all side in case of corruption and malpractice.

Recommendations:

1. Parties should do their due diligence before redeeming electoral bonds.

Start coding or generate with AI.

Double-click (or enter) to edit

Details of Electoral Bonds that were bought for Political Parties running Governments in Centre and prominent States. i.e. BJP , INC , TMC, AAP , BRS and DMK

A. BHARATIYA JANATA PARTY

```
BJP1=Tidy_List[Tidy_List["Name of the Political Party"]=="BHARATIYA JANATA PARTY"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()
BJP1=BJP1.to_frame().reset_index()
BJP1.rename(columns={"Denominations": 'Amount_recieived'},inplace=True)
BJP1
```

	Date of\rPurchase	Name of the Purchaser	Amount_recieived	
0	01/Jul/2022	DR REDDYS LABORATORIES LIMITED	10000000	
1	01/Jul/2022	NATCO PHARMA LIMITED	20000000	
2	01/Oct/2019	HALDIA ENERGY LIMITED	10000000	
3	01/Oct/2019	TORRENT POWER LIMITED	50000000	
4	01/Oct/2019	TORRENT PHARMACEUTICALS LIMITED	50000000	
...	
672	27/Jan/2023	PRAGATI ENTERPRISES	35000000	
673	27/Jan/2023	SOPANRAO BALKRISHNA DHASAL AGRO PRODUCTS LIMITED	2000000	
674	27/Oct/2020	JINDAL SAW LIMITED	50000000	
675	27/Oct/2020	WELSPUN CORP LTD	70000000	
676	28/Oct/2020	INDIA GLYCOLS LTD	19900000	

677 rows × 3 columns

Next steps: [Generate code with BJP1](#)

[View recommended plots](#)

```
BJP1["year/month of Purchase"] = pd.to_datetime(BJP1['Date of\rPurchase'], format='mixed').dt.strftime("%y-%m")
BJP1.drop(columns=["Date of\rPurchase", "Name of the Purchaser"], axis=1, inplace=True)
```

```
BJP1=BJP1.groupby("year/month of Purchase")["Amount_recieved"].sum().to_frame()
BJP1
```

year/month of Purchase	Amount_recieved
19-04	5975601000
19-05	7077000000
19-07	150000000
19-10	1851800000
20-01	530000000
20-10	208900000
21-01	14950000
21-04	2915000000
21-07	180000000
21-10	620000000
22-01	6622000000
22-04	985000000
22-07	125000000
22-10	2225000000
22-11	6028499000
22-12	1650000000
23-01	1928000000
23-04	3342450000
23-07	869301000
23-10	3590500000
23-11	7033010000
24-01	2020000000

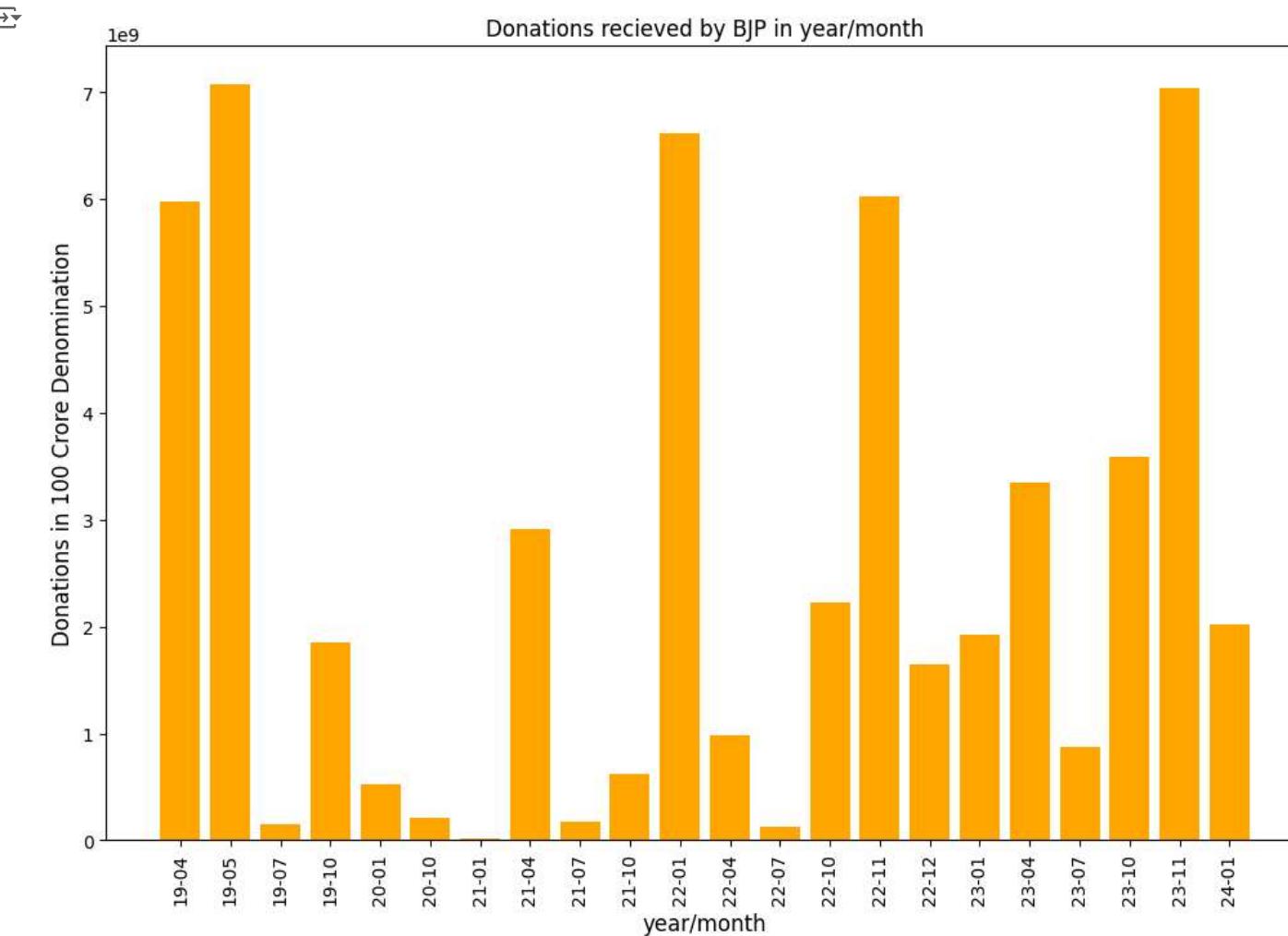
Next steps: [Generate code with BJP1](#)

 [View recommended plots](#)

```

x_bar = BJP1.index
y_bar = BJP1["Amount_recieved"]
plt.figure(figsize=(12, 8))
plt.bar(x_bar, y_bar,color="orange")
plt.title("Donations recieved by BJP in year/month")
plt.ylabel("Donations in 100 Crore Denomination",fontsize=12)
plt.xlabel("year/month",fontsize=12)
plt.xticks(rotation=90)
plt.show()

```



B. INDIAN NATIONAL CONGRESS

```
Tidy_List[Tidy_List["Name of the Political Party"]=="PRESIDENT, ALL INDIA CONGRESS COMMITTEE"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()
```

```

Date of\rPurchase Name of the Purchaser
01/Jul/2022 MKJ ENTERPRISES LIMITED 120000000
                  TRANSWAYS EXIM PVT LTD 3000000
02/Apr/2022 GOURAB ROY 2000000
                  SRABANI ROY 500000
02/Jul/2021 BHUDUTT JANGID 500000
                  ...
21/Jan/2020 JANAM ENTERPRISES 3500000
                  SHREE CEMENT LTD 40000000
                  TANUSHREE LOGISTICS PRIVATE LIMITED 6000000
21/Jan/2023 KAMAL MANOHAR 3000000
23/Jan/2023 MAHESH NARAYAN KHADE 5000000
Name: Denominations, Length: 438, dtype: int64

```

```

INC1=Tidy_List[Tidy_List["Name of the Political Party"]=="PRESIDENT, ALL INDIA CONGRESS COMMITTEE"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()
INC1=INC1.to_frame().reset_index()
INC1.rename(columns={'Denominations': 'Amount_recieved'},inplace=True)
INC1

```

	Date of\rPurchase	Name of the Purchaser	Amount_recieved	
0	01/Jul/2022	MKJ ENTERPRISES LIMITED	120000000	
1	01/Jul/2022	TRANSWAYS EXIM PVT LTD	3000000	
2	02/Apr/2022	GOURAB ROY	2000000	
3	02/Apr/2022	SRABANI ROY	500000	
4	02/Jul/2021	BHUDUTT JANGID	500000	
...	
433	21/Jan/2020	JANAM ENTERPRISES	3500000	
434	21/Jan/2020	SHREE CEMENT LTD	40000000	
435	21/Jan/2020	TANUSHREE LOGISTICS PRIVATE LIMITED	6000000	
436	21/Jan/2023	KAMAL MANOHAR	3000000	
437	23/Jan/2023	MAHESH NARAYAN KHADE	5000000	

438 rows × 3 columns

Next steps: [Generate code with INC1](#)

[View recommended plots](#)

```

INC1["year/month of Purchase"]=pd.to_datetime(INC1['Date of\rPurchase'], format='mixed').dt.strftime("%y-%m")
INC1.drop(columns=["Date of\rPurchase", "Name of the Purchaser"], axis=1, inplace=True)
INC1=INC1.groupby("year/month of Purchase")["Amount_recieved"].sum().to_frame()
INC1

```



Amount_recieved



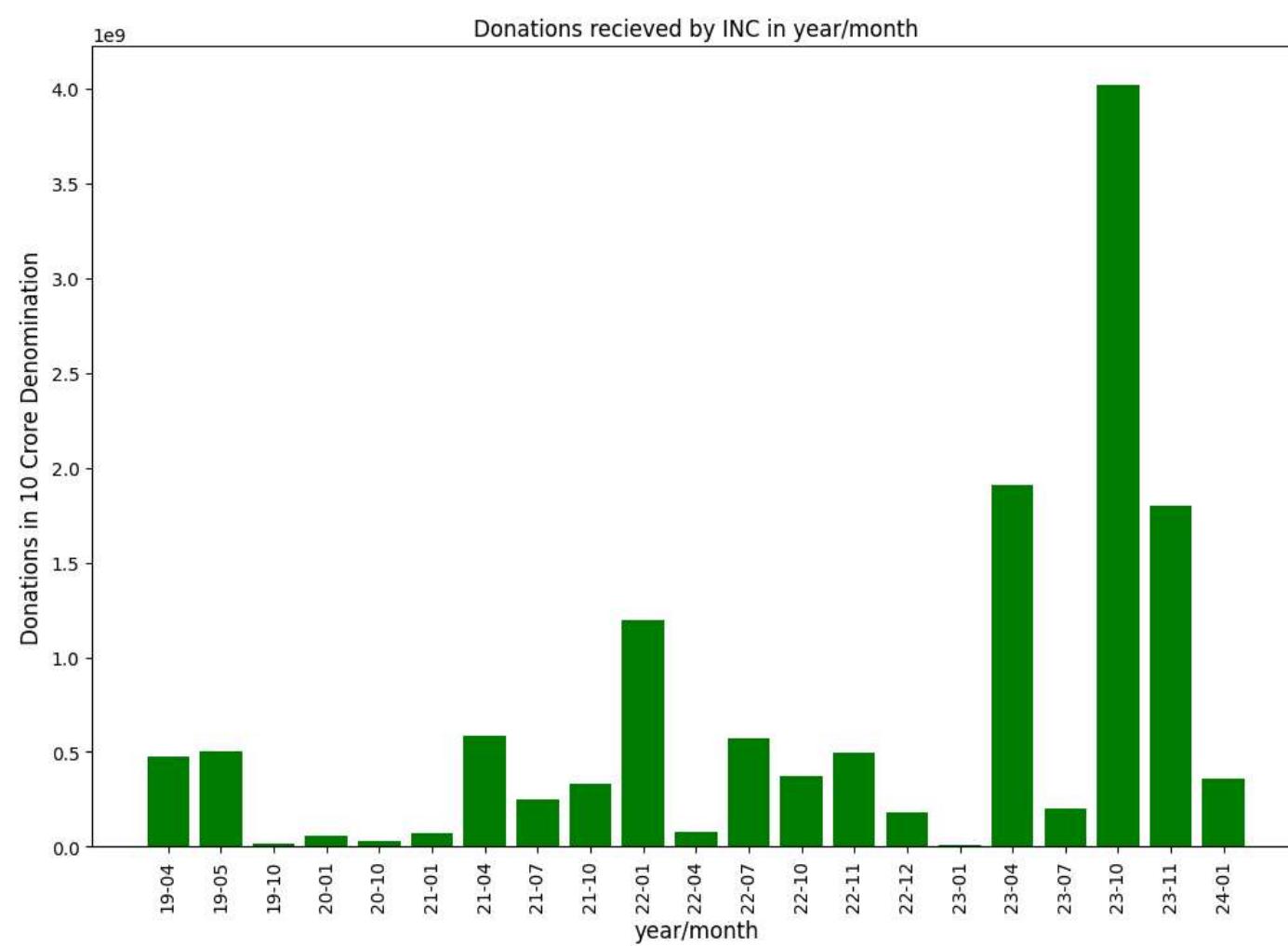
year/month of Purchase



19-04	477900000
19-05	500000000
19-10	17500000
20-01	60000000
20-10	30000000
21-01	70750000
21-04	587500000
21-07	247000000
21-10	333995000
22-01	1192500000
22-04	80000000
22-07	575000000
22-10	372000000
22-11	494100000
22-12	180000000
23-01	9100000
23-04	1905500000
23-07	205000000
23-10	4019100000
23-11	1795000000
24-01	359000000

Next steps: [Generate code with INC1](#)[View recommended plots](#)

```
x_bar = INC1.index
y_bar = INC1["Amount_recieved"]
plt.figure(figsize=(12, 8))
plt.bar(x_bar, y_bar,color="green")
plt.title("Donations recievied by INC in year/month")
plt.ylabel("Donations in 10 Crore Denomination",fontsize=12)
plt.xlabel("year/month",fontsize=12)
plt.xticks(rotation=90)
plt.show()
```



C. ALL INDIA TRINAMOOL CONGRESS

```
Tidy_List[Tidy_List["Name of the Political Party"]=="ALL INDIA TRINAMOOL CONGRESS"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()
```

Date of\rPurchase	Name of the Purchaser	Denominations
01/Oct/2019	AVEES TRADING & FINANCE PVT LTD	20000000
02/Jul/2021	SHIV SHANKAR SECURITIES PVT LTD	300000
03/Apr/2021	PHILLIPS CARBON BLACK LIMITED	10000000
03/Jan/2024	KALPTARU INVESTMENTS PVT.LTD. PROP KUSUM MAROTI	25000000 1500000
		...
25/Jan/2023	FUTURE GAMING AND HOTEL SERVICES PR	15000000
27/Jan/2023	ARUNANGSHU MUKHERJEE	5000000
	RASHMI CEMENT LTD	9000000
27/Oct/2020	FUTURE GAMING AND HOTEL SERVICES PR	10000000

UTKARSH SFATIK LIMITED 10000000
Name: Denominations, Length: 394, dtype: int64

D. AAM AADMI PARTY

Tidy_List[Tidy_List["Name of the Political Party"]=="AAM AADMI PARTY"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()

Date of\rPurchase	Name of the Purchaser	Denominations
01/Oct/2022	TRANSWAYS EXIM PRIVATE LIMITED	40000000
03/Jan/2022	TORRENT POWER LTD	20000000
04/Jul/2023	TRANSWAYS EXIM PRIVATE LIMITED	30000000
04/Oct/2022	ANAND SAKHARAM PIMPARKAR	1000000
06/Jan/2022	V M SALGAOCAR CORPORATION PVT LTD	500000
		...
14/Nov/2022	PARAMJIT SINGH S O JAGJIT SINGH	2000000
15/Nov/2022	BIRD WORLDWIDE FLIGHT SERVICES INDI	20000000
18/Jan/2020	LEPTON SOFTWARE EXPORT AND RESEARCH PRIVATE LTD	1000000
21/Jan/2020	KRBL LTD	2000000
28/Oct/2020	BAJAJ AUTO LTD	30000000

Name: Denominations, Length: 61, dtype: int64

E. BHARAT RASHTRA SAMITHI

Tidy_List[Tidy_List["Name of the Political Party"]=="BHARAT RASHTRA SAMITHI"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()

Date of\rPurchase	Name of the Purchaser	Denominations
01/Jul/2022	NATCO PHARMA LIMITED	100000000
03/Jul/2023	MODERN ROAD MAKERS PVT LTD	50000000
	SUPER CYBERTECH PARK PRIVATE LIMITE	100000000
04/Apr/2022	YASHODA SUPER SPECIALITY HOSPITAL	500000000
04/Jul/2023	IRB MP EXPRESSWAY PRIVATE LIMITED	250000000
		...
16/Nov/2023	DESAI TRADING CONSULTANTS PVT LTD	10000000
17/Nov/2023	WELSPUN LIVING LIMITED	50000000
	YUVAN TRADING CONSULTANCY LLP	20000000
18/Nov/2023	INORBIT MALLS INDIA PRIVATE LIMIT	50000000
25/Jan/2023	BUILDOX DEVELOPERS LLP	500000

Name: Denominations, Length: 259, dtype: int64

F. DRAVIDA MUNNETRA KAZHAGAM (DMK)

Tidy_List[Tidy_List["Name of the Political Party"]=="DRAVIDA MUNNETRA KAZHAGAM (DMK)"].groupby(["Date of\rPurchase","Name of the Purchaser"])["Denominations"].sum()

Date of\rPurchase	Name of the Purchaser	Denominations
03/Apr/2021	KAL RADIO LIMITED	35000000
	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	400000000
	SOUTH ASIA FM LIMITED	35000000
	SUN DISTRIBUTION SERVICES PVT LTD	30000000
	THE INDIA CEMENTS LTD	40000000
05/Apr/2021	FUTURE GAMING AND HOTEL SERVICES PR	490000000
05/Apr/2023	FUTURE GAMING AND HOTEL SERVICES PR	400000000
05/Jan/2022	FUTURE GAMING AND HOTEL SERVICES PR	500000000
05/Oct/2021	FUTURE GAMING AND HOTEL SERVICES PR	990000000
06/Jan/2022	FUTURE GAMING AND HOTEL SERVICES PRIVATE LIMITED	500000000

06/Jul/2022	FUTURE GAMING AND HOTEL SERVICES PR	500000000
06/Oct/2022	FERTILELAND FOODS PRIVATE LIMITED	500000000
	FUTURE GAMING AND HOTEL SERVICES PR	500000000
07/Apr/2022	FUTURE GAMING AND HOTEL SERVICES PR	1000000000
08/Jul/2022	MEGHA ENGINEERING & INFRASTRUCTURES LIMITED	250000000
09/Apr/2021	THRIVENI EARTH MOVERS PVT LTD	30000000
09/Jan/2024	SANDEEP AUTO LINES	10000000
10/Jan/2024	ASKUS LOGISTICS PVT LTD	70000000
	HERALD BEVERAGES PRIVATE LIMITED	40000000
11/Jan/2024	WESTWELL GASES PRIVATE LIMITED	80000000
16/Apr/2019	MODERN ROAD MAKERS PVT LTD	20000000
21/Oct/2020	FUTURE GAMING AND HOTEL SERVICES PR	600000000
23/Oct/2020	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	100000000
27/Oct/2020	MEGHA ENGINEERING AND INFRASTRUCTURES LI MITED	100000000

Name: Denominations, dtype: int64

Insights:

- Opposition time and again allege parties in Centre and State governments for using agencies, handing out contracts and modifying policies as a mean to influence corporates into buying electoral bonds.

Reccomendation:

- Such allegations can be corroborated by matching the dates on which electoral bonds were bought by corporates in question for the intended political parties and then those dates can be matched against timelines when major policy decisions were taken by governments of the day, establishing a money trail for whistle blowing.
- Electoral bonds was a major electoral reform in India and should be reformed and reinstated.
- Electoral bonds could have been made public once after a stipulated time period so that black money could be curbed while bringing in political accountability.

Start coding or [generate](#) with AI.

Double-click (or enter) to edit

Double-click (or enter) to edit