

```

import numpy as np
import pandas as pd
import seaborn as sns

import os
import matplotlib.pyplot as plt

import sklearn
from sklearn.svm import SVC
from sklearn.metrics import balanced_accuracy_score, roc_auc_score,
accuracy_score, confusion_matrix, roc_curve
from scipy.stats import zscore, pearsonr, uniform
from sklearn.linear_model import Ridge
from sklearn.model_selection import KFold, StratifiedKFold,
RandomizedSearchCV

from scipy.io import loadmat

from sklearn.model_selection import train_test_split
from sklearn.preprocessing import StandardScaler
from sklearn.metrics import roc_auc_score
from sklearn.metrics import accuracy_score

```

I have used the given database 4.1. The database values or the actual table is been copied to another excel file and the following visualisations are done on that file

#Data from 4.1 loaded

```

data = pd.read_excel('4.1NEW.xlsx')
data

```

	Item Description	2011-12	2012-13	2013-14	2014-15
2015-16 \					
0	Gross Value Added	794894	810124	822848	875123
921207					
1	consumption of fixed capital	98623	102211	107181	111909
117267					
2	Net Value Added	696271	707913	715667	763214
803940					
3	central government*	196076	201181	203550	221388
225046					
4	state government	385345	390989	398809	417947
446450					
5	Andhra Pradesh	19150	19058	20027	23056
28425					
6	Arunachal Pradesh	1960	2020	2201	2267
2500					
7	Assam	11815	12045	13357	14166
16973					
8	Bihar	19967	21787	22461	22472
23284					

9	Chhattisgarh	8750	8756	8903	9194
9697					
10	Delhi	6899	7052	6903	7508
7832					
11	Goa	1438	1483	1520	1601
1677					
12	Gujarat	11366	11671	12081	12598
12971					
13	Haryana	12271	12917	12717	14657
15166					
14	Himachal Pradesh	7633	8224	7784	8181
8418					
15	Jammu & Kashmir	12369	12253	12248	11643
13615					
16	Jharkhand	10649	10012	9709	11041
9834					
17	Karnataka	10745	12313	13277	13826
13986					
18	Kerala	25277	25036	24573	25122
27004					
19	Madhya Pradesh	18096	19701	19361	19547
20116					
20	Maharashtra	26355	27377	28558	27655
28994					
21	Manipur	2647	2621	2739	2904
2793					
22	Meghalaya	1898	1769	1952	1947
1971					
23	Mizoram	1713	1847	2009	2000
2063					
24	Nagaland	2775	2930	3100	3120
3205					
25	Odisha	15680	15378	16156	16270
16341					
26	Puducherry	1261	1337	1261	1384
1414					
27	Punjab	16893	17289	16731	17925
18378					
28	Rajasthan	18600	18783	19899	22609
24543					
29	Sikkim	966	1003	1057	1196
1206					
30	Tamilnadu	37918	35584	37184	39788
39984					
31	Telangana	13867	13536	14320	16546
23341					
32	Tripura	2840	2717	2783	2533
3228					
33	Uttarakhand	5775	5607	6829	7408

7857							
34		Uttar Pradesh	38510	39825	38700	39894	
41273							
35		West Bengal	19262	19058	18409	17889	
18361							
36		local bodies	75343	75204	74348	82560	
86980							
37		autonomous institutions	39507	40539	38960	41319	
45464							

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
0	998145	1094795	1171388	1222545	1201747	1235990	1310070
1	124093	131115	137992	145239	153141	160876	171288
2	874052	963680	1033396	1077306	1048606	1075114	1138782
3	265516	289744	295104	305293	294045	286830	290766
4	469464	524478	579057	595104	580246	607806	658918
5	27573	30358	33630	34666	35456	35230	37046
6	2816	3453	3183	3427	3364	3617	3900
7	17481	21886	20295	20693	19229	23330	27009
8	24575	27290	31627	30952	29026	28026	35989
9	10290	11460	14848	17832	16657	17086	18669
10	9531	9953	10941	11825	12642	12356	13541
11	1763	2262	2309	2260	2201	2388	3059
12	13050	16741	20513	18677	18626	18893	21027
13	16287	18593	18946	20339	20160	20695	21941
14	9157	9941	10495	10940	10900	10820	13779
15	13260	13864	19272	19056	19212	19993	22724
16	9042	10573	12574	11751	11689	12220	13077
17	13868	14290	17929	19550	19120	20318	22491
18	30615	34605	32590	30808	26759	31994	27711
19	22192	22883	26125	27028	31815	33054	37814
20	29878	31042	32443	41624	40674	44065	50060
21	2844	2930	2882	3012	3128	3526	4504
22	2154	2426	3022	3034	2837	2971	3174
23	2216	2355	2546	3042	2744	2482	2723
24	3190	3430	3890	4111	3996	4265	4434
25	16119	18781	20108	22362	20582	22902	23887
26	1519	1602	1807	1760	1592	1680	1787
27	19002	20457	20262	19862	21200	22338	24951
28	27431	32193	43169	40295	40476	42859	44961
29	1140	1174	1519	2206	2010	2023	2131
30	41694	44289	52118	52224	46471	45459	49434
31	23691	25654	24029	21465	20719	21435	19892
32	3441	4222	4607	4759	4117	4189	4686
33	8753	11031	10604	9763	10295	11060	11285
34	44904	54452	59411	62725	57477	59029	65114
35	19988	20288	21363	23056	25072	27503	26118
36	90605	98196	108842	115312	113064	113916	121090
37	48467	51262	50393	61597	61251	66562	68008

Basic data description

```
data.describe()
```

	2011-12	2012-13	2013-14	2014-15 \
count	38.000000	38.000000	38.000000	38.000000
mean	70300.105263	71556.578947	72636.105263	77142.289474
std	175575.704687	178731.582763	181288.839693	192841.408559
min	966.000000	1003.000000	1057.000000	1196.000000
25%	6056.000000	5968.250000	6847.500000	7433.000000
50%	13118.000000	13226.500000	13838.500000	15463.500000
75%	26085.500000	26791.750000	27561.750000	27021.750000
max	794894.000000	810124.000000	822848.000000	875123.000000

	2015-16	2016-17	2017-18	2018-19
2019-20 \				
count	38.000000	38.000000	3.800000e+01	3.800000e+01
mean	81389.578947	87889.631579	9.678284e+04	1.040850e+05
std	203136.502306	220255.178391	2.424031e+05	2.600297e+05
min	1206.000000	1140.000000	1.174000e+03	1.519000e+03
25%	7838.250000	8825.250000	9.944000e+03	1.052225e+04
50%	16657.000000	16884.000000	1.953450e+04	2.027850e+04
75%	28851.750000	30430.750000	3.400200e+04	4.078425e+04
max	921207.000000	998145.000000	1.094795e+06	1.171388e+06

	2020-21	2021-22	2022-23
count	3.800000e+01	3.800000e+01	3.800000e+01
mean	1.061144e+05	1.093395e+05	1.162589e+05
std	2.648951e+05	2.722782e+05	2.889400e+05
min	1.592000e+03	1.680000e+03	1.787000e+03
25%	1.044625e+04	1.088000e+04	1.173300e+04
50%	2.037100e+04	2.188650e+04	2.330550e+04
75%	4.062450e+04	4.376350e+04	4.831575e+04
max	1.201747e+06	1.235990e+06	1.310070e+06

```
# Check dataset structure again
```

```
data.info()
```

```
# Display unique values in "Item Description" to confirm category names
data["Item Description"].unique()
```

```
<class 'pandas.core.frame.DataFrame'>
```

```
RangeIndex: 38 entries, 0 to 37
```

```
Data columns (total 13 columns):
```

#	Column	Non-Null Count	Dtype
0	Item Description	38 non-null	object
1	2011-12	38 non-null	int64
2	2012-13	38 non-null	int64
3	2013-14	38 non-null	int64
4	2014-15	38 non-null	int64
5	2015-16	38 non-null	int64
6	2016-17	38 non-null	int64
7	2017-18	38 non-null	int64
8	2018-19	38 non-null	int64
9	2019-20	38 non-null	int64
10	2020-21	38 non-null	int64
11	2021-22	38 non-null	int64
12	2022-23	38 non-null	int64

```
dtypes: int64(12), object(1)
```

```
memory usage: 4.0+ KB
```

```
array(['Gross Value Added', 'consumption of fixed capital',  
      'Net Value Added', 'central government*', 'state government',  
      'Andhra Pradesh', 'Arunachal Pradesh', 'Assam', 'Bihar',  
      'Chhattisgarh', 'Delhi', 'Goa', 'Gujarat', 'Haryana',  
      'Himachal Pradesh', 'Jammu & Kashmir', 'Jharkhand',  
      'Karnataka',  
      'Kerala', 'Madhya Pradesh', 'Maharashtra', 'Manipur',  
      'Meghalaya',  
      'Mizoram', 'Nagaland', 'Odisha', 'Puducherry', 'Punjab',  
      'Rajasthan', 'Sikkim', 'Tamilnadu', 'Telangana', 'Tripura',  
      'Uttarakhand', 'Uttar Pradesh', 'West Bengal', 'local bodies',  
      'autonomous institutions'], dtype=object)
```

```
import pandas as pd
```

```
import matplotlib.pyplot as plt
```

```
# Load dataset
```

```
file_path = "4.1NEWW.xlsx"
```

```
df = pd.read_excel(file_path, sheet_name="Sheet1")
```

```
# Clean column names
```

```
df.columns = df.columns.str.strip()
```

```
df["Item Description"] = df["Item Description"].astype(str).str.strip()
```

```
# Select correct year range
```

```
years = df.columns[2:14] # Adjust as necessary
```

```
# Extract government-related data
```

```
gov_metrics = ["central government*", "state government"]
```

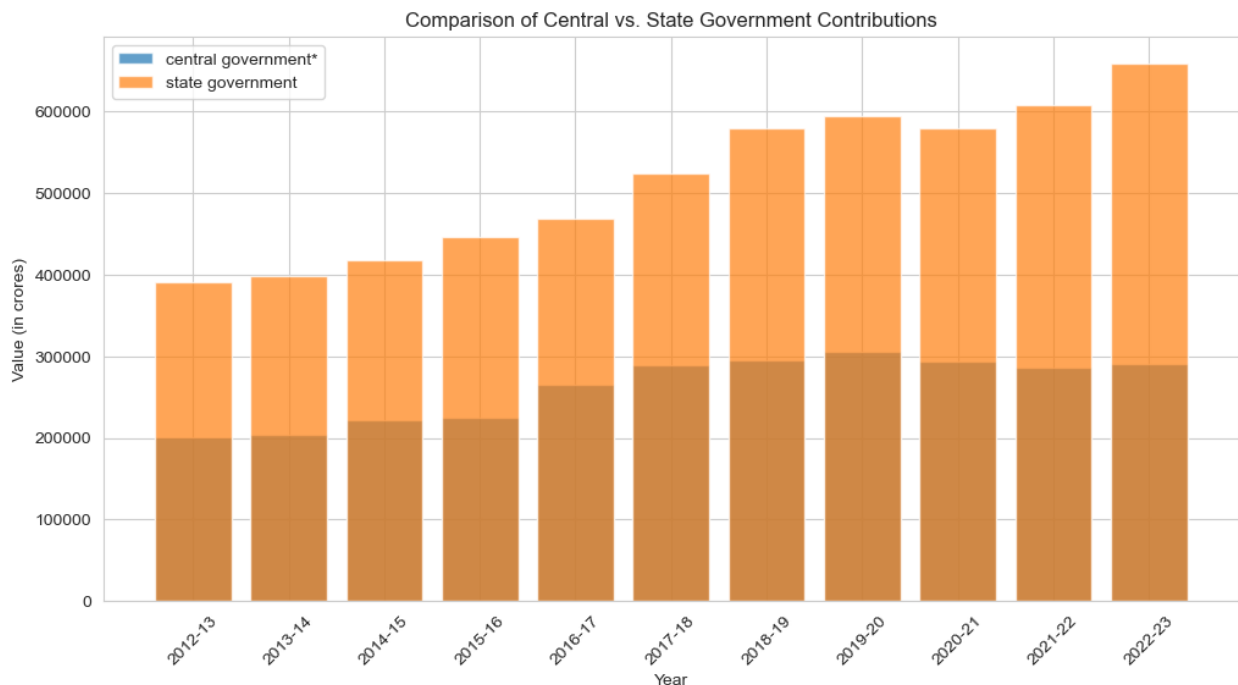
```
df_gov = df[df["Item Description"].isin(gov_metrics)]

# Debugging step: Check what data is extracted
print(df_gov)

# Plot bar chart
plt.figure(figsize=(12, 6))
for index, row in df_gov.iterrows():
    plt.bar(years, row[years], label=row["Item Description"],
            alpha=0.7)

plt.xlabel("Year")
plt.ylabel("Value (in crores)")
plt.title("Comparison of Central vs. State Government Contributions")
plt.xticks(rotation=45)
plt.legend()
plt.show()
```

	Item Description	2011-12	2012-13	2013-14	2014-15	2015-16
2016-17 \						
3	central government*	196076	201181	203550	221388	225046
265516						
4	state government	385345	390989	398809	417947	446450
469464						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
3	289744	295104	305293	294045	286830	290766
4	524478	579057	595104	580246	607806	658918



```

print(df.columns)

Index(['Item Description', '2011-12', '2012-13', '2013-14', '2014-15',
      '2015-16', '2016-17', '2017-18', '2018-19', '2019-20', '2020-21',
      '2021-22', '2022-23'],
      dtype='object')

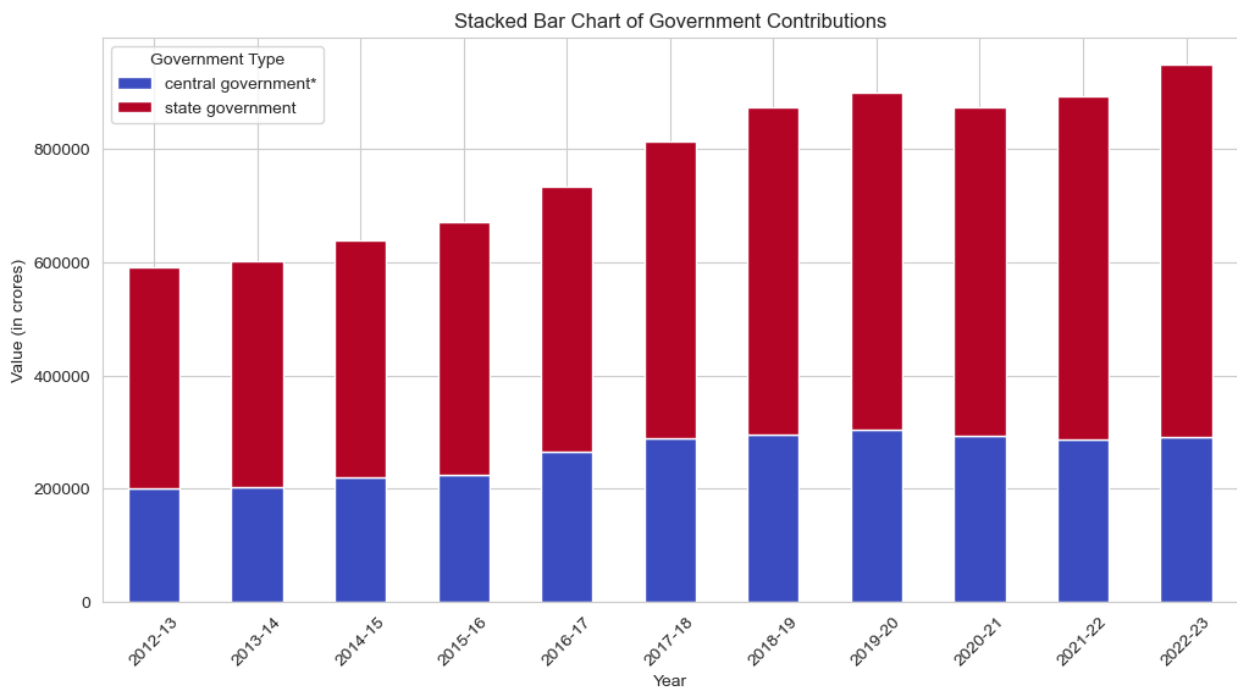
import seaborn as sns

plt.show()

# --- 1. Government Contributions (Stacked Bar Chart) ---
plt.figure(figsize=(12, 6))
dfGov.set_index("Item Description")[years].T.plot(kind="bar",
stacked=True, figsize=(12,6), colormap="coolwarm")
plt.xlabel("Year")
plt.ylabel("Value (in crores)")
plt.title("Stacked Bar Chart of Government Contributions")
plt.xticks(rotation=45)
plt.legend(title="Government Type")
plt.show()

<Figure size 1200x600 with 0 Axes>

```



```

# --- 2. State-wise Economic Growth (Heatmap) ---
state_data = df[df["Item Description"].str.contains("state",
case=False, na=False)][["Item Description"] + list(years)]

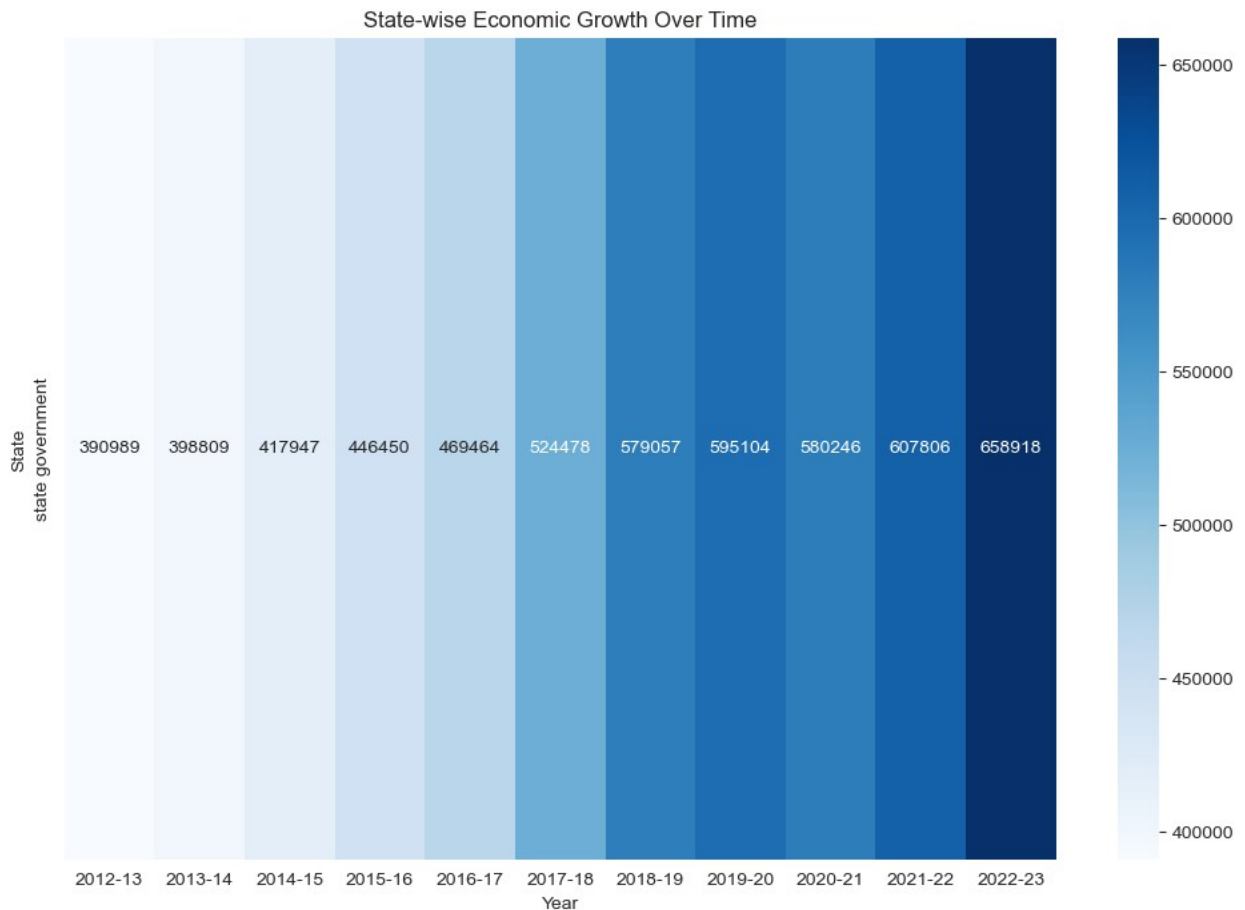
```

```

state_data = state_data.set_index("Item Description")

plt.figure(figsize=(12, 8))
sns.heatmap(state_data, cmap="Blues", annot=True, fmt=".0f")
plt.title("State-wise Economic Growth Over Time")
plt.xlabel("Year")
plt.ylabel("State")
plt.show()

```



```

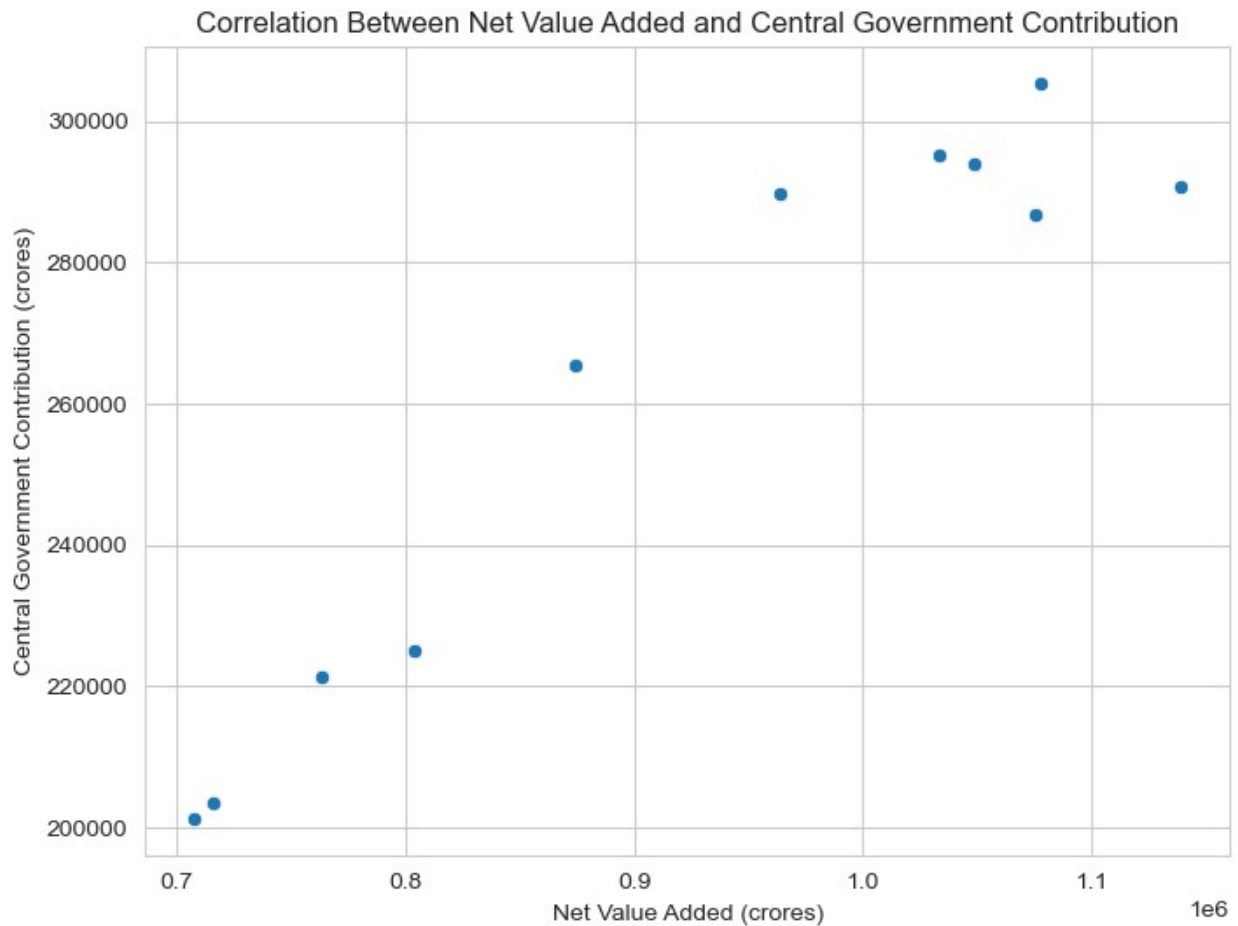
# Correlation Between Net Value Added and Government Contributions
(Scatter Plot) ---
net_value_added = df[df["Item Description"] == "Net Value Added"]
[years].values.flatten()
central_gov = df[df["Item Description"] == "central government*"]
[years].values.flatten()

plt.figure(figsize=(8, 6))
sns.scatterplot(x=net_value_added, y=central_gov)
plt.xlabel("Net Value Added (crores)")
plt.ylabel("Central Government Contribution (crores)")

```

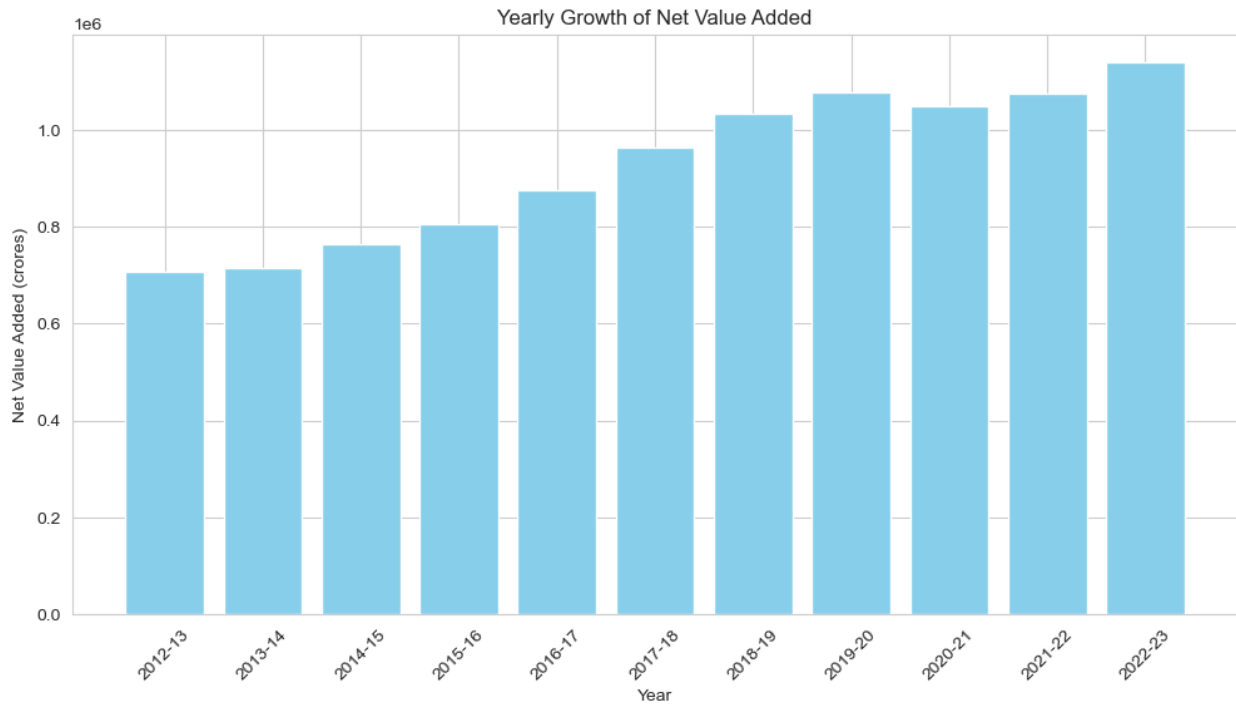


```
plt.title("Correlation Between Net Value Added and Central Government Contribution")
plt.show()
```



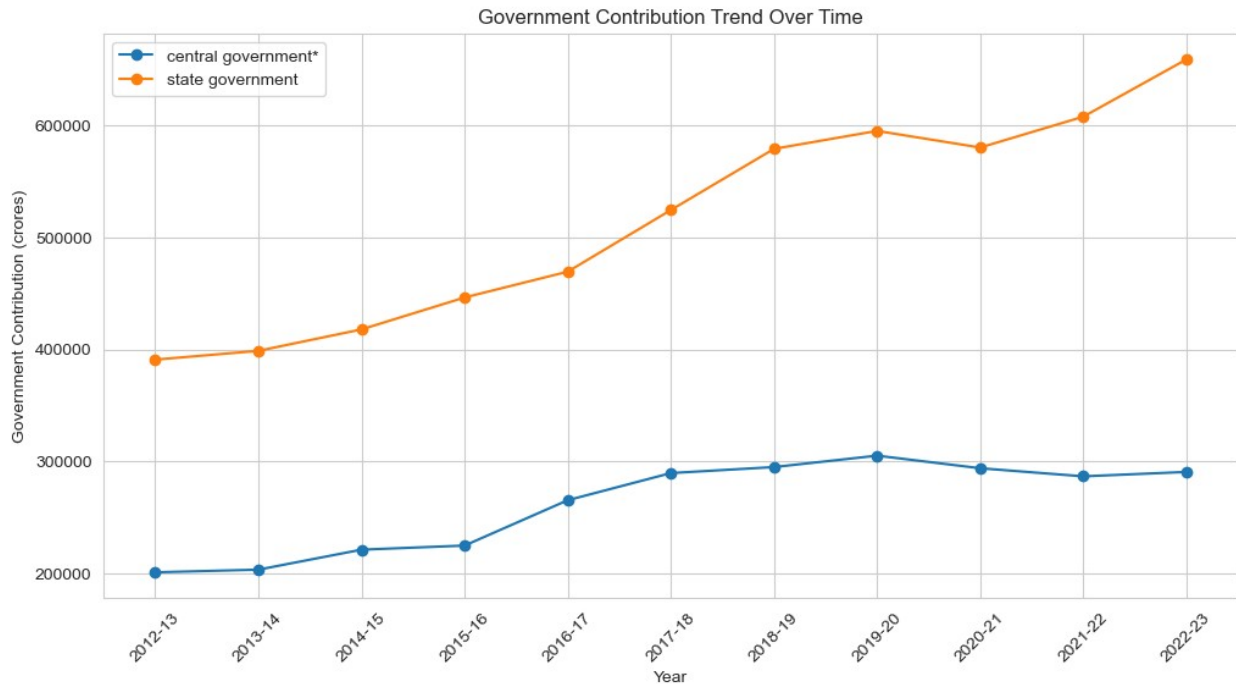
```
plt.figure(figsize=(12, 6))
net_value_added = df[df["Item Description"] == "Net Value Added"]
[years].values.flatten()
plt.bar(years, net_value_added, color='skyblue')

plt.xlabel("Year")
plt.ylabel("Net Value Added (crores)")
plt.title("Yearly Growth of Net Value Added")
plt.xticks(rotation=45)
plt.show()
```



```
plt.figure(figsize=(12, 6))
for gov_type in ["central government*", "state government"]:
    gov_values = df[df["Item Description"] == gov_type]
    [years].values.flatten()
    plt.plot(years, gov_values, marker='o', label=gov_type)

plt.xlabel("Year")
plt.ylabel("Government Contribution (crores)")
plt.title("Government Contribution Trend Over Time")
plt.legend()
plt.xticks(rotation=45)
plt.show()
```



```
# Importing necessary libraries
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# Setting display options for better readability
pd.set_option('display.max_columns', None)
pd.set_option('display.width', None)

# Loading Data
# Load the expenditure data from 4.2NEWW.xlsx
try:
    expenditure_data = pd.read_excel('4.2NEWW.xlsx',
    sheet_name='Sheet1')
    print("Expenditure Data loaded successfully.")
except FileNotFoundError:
    print("Error: Expenditure data file not found.")
    expenditure_data = None

# Load the GVA data from 4.1NEWW.xlsx
try:
    gva_data = pd.read_excel('4.1NEWW.xlsx', sheet_name='Sheet1')
    print("GVA Data loaded successfully.")
except FileNotFoundError:
    print("Error: GVA data file not found.")
    gva_data = None

# Skip further processing if data loading failed
```

```

if expenditure_data is None or gva_data is None:
    print("Skipping further processing due to data loading failure.")
else:
    # Display the first few rows of each dataset
    print("Expenditure Data:")
    print(expenditure_data.head())

    print("\nGVA Data:")
    print(gva_data.head())

    # Display column names to identify correct columns for GVA Data
    print("\nColumn Names in GVA Data:")
    print(gva_data.columns)
    print("\nColumn Names in Expenditure Data:")
    print(expenditure_data.columns)

    # Data Exploration
    # Summary statistics for expenditure data
    expenditure_summary = expenditure_data.describe()

    # Summary statistics for GVA data
    gva_summary = gva_data.describe()

    print("\nSummary Statistics for Expenditure Data:")
    print(expenditure_summary)

    print("\nSummary Statistics for GVA Data:")
    print(gva_summary)

    # Visualizations

    ## Plotting total expenditure over different categories
    if 'मद' in expenditure_data.columns and 'कुल' in
expenditure_data.columns:
        plt.figure(figsize=(12, 6))
        sns.barplot(x='मद', y='कुल ', data=expenditure_data) #
Adjusted column name based on actual dataset structure
        plt.title('Total Expenditure by Category')
        plt.xlabel('Expenditure Categories')
        plt.ylabel('Total Expenditure')
        plt.xticks(rotation=45, ha='right')
        plt.tight_layout()
        plt.show()
    else:
        print("Error: Required columns for barplot not found in
expenditure data.")

    ## Plotting Gross Value Added over the years
    # Ensure correct column name by stripping any whitespace or
special characters

```

```

    gva_column_name = 'सकल मूल्य वर्धन' # Replace with the correct column
name if needed

    # Ensure the column exists in the DataFrame
    if 'क्र. सं.' in gva_data.columns and gva_column_name in
gva_data.columns:
        plt.figure(figsize=(12, 6))
        sns.lineplot(data=gva_data, x='क्र. सं.', y=gva_column_name) #
Adjusted based on actual column names in your file
        plt.title('Gross Value Added Over Years')
        plt.xlabel('Year')
        plt.ylabel('Gross Value Added')
        plt.xticks(rotation=45, ha='right')
        plt.tight_layout()
        plt.show()
    else:
        print(f"Error: Required columns for lineplot not found in GVA
data.")

    ## Additional Visualization: State-wise GVA Contribution (Example)
    # Correct and Robust Column Selection for State-wise GVA
Contribution
    state_columns = ['आंध्र प्रदेश', 'गुजरात', 'महाराष्ट्र']
    available_columns = [col for col in state_columns if col in
gva_data.columns]

    if 'क्र. सं.' in gva_data.columns and available_columns:
        statewise_gva = gva_data[['क्र. सं.'] + available_columns] #
Select available state columns

        statewise_gva.plot(x='क्र. सं.', figsize=(12, 6))
        plt.title('State-wise GVA Contribution Over Years')
        plt.xlabel('Year')
        plt.ylabel('Gross Value Added')
        plt.legend(title="States")
        plt.xticks(rotation=45, ha='right')
        plt.tight_layout()
        plt.show()
    else:
        print("Error: Required columns for state-wise GVA not found in
GVA data.")

    # Visualizations

    # 1. Box Plot of GVA across different years
    year_columns = [col for col in gva_data.columns if col.isdigit()
or '-' in str(col)]
    if year_columns:
        plt.figure(figsize=(14, 8))

```

```

sns.boxplot(data=gva_data[year_columns])
plt.title('Distribution of GVA Across Different Years')
plt.xlabel('Year')
plt.ylabel('Gross Value Added')
plt.xticks(rotation=45, ha='right')
plt.tight_layout()
plt.show()
else:
    print("Error: No valid year columns found in GVA data.")

# 2. Scatter Plot of expenditure
sector_cols = ['रक्षा', 'शिक्षा']
available_sector_cols = [col for col in sector_cols if col in
expenditure_data.columns]
if len(available_sector_cols) == 2: # Check if we have exactly
two columns
    plt.figure(figsize=(10, 6))
    sns.scatterplot(x=expenditure_data[available_sector_cols[0]],
y=expenditure_data[available_sector_cols[1]], data=expenditure_data)
    plt.title(f'Scatter Plot of {available_sector_cols[0]} vs
{available_sector_cols[1]}')
    plt.xlabel(available_sector_cols[0])
    plt.ylabel(available_sector_cols[1])
    plt.tight_layout()
    plt.show()
else:
    print("Error: Exactly two valid columns needed for scatter
plot")

# 3. Stacked Bar Chart expenditure data
expenditure_sector = ['सामान्य सार्वजनिक सेवाएं ', 'रक्षा ', 'शिक्षा ']
available_sector_values = [col for col in expenditure_sector if
col in expenditure_data.columns]
if len(available_sector_values) > 1:
    subset_data = expenditure_data[available_sector_values].sum()
    plt.figure(figsize=(10, 6))
    subset_data.plot(kind='bar', stacked=True)
    plt.title('Expenditure by Sector')
    plt.xlabel('Sector')
    plt.ylabel('Expenditure')
    plt.xticks(rotation=45, ha='right')
    plt.tight_layout()
    plt.show()
else:
    print("Error: Need more than 1 values to draw a chart")

# 4. Pairwise Relationship
numeric_expenditure_data =
expenditure_data.select_dtypes(include=['number'])

```

```

numeric_columns = numeric_expenditure_data.columns.tolist()

columns_to_exclude = ['क्र.सं.', 'S.No.'] # Example column names.
numeric_columns = [col for col in numeric_columns if col not in
columns_to_exclude]
if len(numeric_columns) >= 2:
    correlation_matrix =
numeric_expenditure_data[numeric_columns].corr()
    plt.figure(figsize=(12, 10)) # Adjust figure size for better
readability
    sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm',
fmt=".2f")
    plt.title('Correlation Heatmap of Expenditure Data')
    plt.tight_layout()
    plt.show()
else:
    print("Less than 2 columns for heatmap")

# 5. Area Chart of expenditure data
expenditure_Area = ['सामान्य सार्वजनिक सेवाएं ', 'रक्षा ']
available_expenditure_Area = [col for col in expenditure_Area if
col in expenditure_data.columns]
if len(available_expenditure_Area) > 1:
    subset_data = expenditure_data[available_expenditure_Area]
    plt.figure(figsize=(10, 6))
    subset_data.sum().plot(kind='area', stacked=True)
    plt.title('expenditure by sectors')
    plt.xlabel('sectors')
    plt.ylabel('expenditure')
    plt.xticks(rotation=45, ha='right')
    plt.tight_layout()
    plt.show()
else:
    print("Area chart not possible as columns are not present")

# 6. Pie chart for top expenditure data
Piechart_data = ['रक्षा ', 'शिक्षा ', 'स्वास्थ्य']
available_data = [col for col in Piechart_data if col in
expenditure_data.columns]
if len(available_data) >= 2:
    # Extract the data
    data_to_plot = expenditure_data[available_data].sum()

    # Create the plot
    plt.figure(figsize=(8, 8))
    plt.pie(data_to_plot, labels=available_data, autopct='%1.1f%
%', startangle=140)
    plt.title('Distribution by expenditure')
    plt.tight_layout()

```

```

plt.show()
else:
    print("Not enough values for a pie chart")

# 7. Horizontal Bar Chart of Expenditure Data
expenditure_categories = ['सामान्य सार्वजनिक सेवाएं ', 'रक्षा ', 'शिक्षा ', 'स्वास्
थ्य']
available_categories = [col for col in expenditure_categories if
col in expenditure_data.columns]
if available_categories:
    expenditure_subset =
expenditure_data[available_categories].sum()
    plt.figure(figsize=(10, 6))
    expenditure_subset.plot(kind='barh')
    plt.title('Horizontal Bar Chart of Expenditure Categories')
    plt.xlabel('Total Expenditure')
    plt.ylabel('Expenditure Category')
    plt.tight_layout()
    plt.show()
else:
    print("Error: No available categories for horizontal bar
chart.")

```

Expenditure Data loaded successfully.

GVA Data loaded successfully.

Expenditure Data:

क्र.सं.	मद सामान्य सार्वजनिक सेवाएं	रक्षा \
0	NaN	NaN
1	1	3.0
2	1	पूंजीतर व्यय 785120.0 472076.0
3	1.1	उपभोग व्यय 266383.0 470465.0
4	1.1.1	कर्मचारियों का पारिश्रमिक 191688.0 380607.0

सार्वजनिक व्यवस्था और सुरक्षा	आर्थिक कार्य \
0	NaN
1	5.0
2	411594.0
3	406042.0
4	386089.0

सामान्य प्रशासन, विनियमन और अनुसंधान \	
0	general administration, regulation & research
1	6.1
2	48074
3	19339
4	14628

कृषि, वानिकी और मत्स्यन		खनन, विनिर्माण और निर्माण \	
0	agriculture,forestry & fishing	mining, manufacturing &	construction
1	6.2		
6.3			
2	481231		
273871			
3	68912		
12929			
4	50393		
9297			
बिजली, गैस, भांप और अन्य स्रोत		जलापूर्ति \	
0	electricity,gas,steam and other sources of energy	water supply	
1	6.4	6.5	
2	211764	36061	
3	5782	24403	
4	5776	12774	
परिवहन और संचार		अन्य आर्थिक सेवाएं पर्यावरण संरक्षण \	
0	transport and communication	other economic services	
NaN			
1	6.6	6.7	
7.0			
2	122833	328229	
3002.0			
3	10503	12233	
418.0			
4	18056	9998	
228.0			
हाउसिंग और सामुदायिक सुविधाएं		स्वास्थ्य \	
0	NaN	NaN	
1	8.0	9.0	
2	329295.0	326305.0	
3	51735.0	215052.0	
4	40914.0	168311.0	
प्रशासन, विनियमन और अनुसंधान		स्वास्थ्य सेवाएं \	
0	administration, regulation & research	health services	
1	9.1	9.2	
2	61236	265068	
3	36173	178879	
4	24240	144071	
मनोरंजन, संस्कृति और धर्म		शिक्षा \	
0	NaN	NaN	
1	10.0	11.0	
2	34010.0	1099804.0	

3	16916.0	596945.0
4	7989.0	537324.0

	प्रशासन, विनियमन और अनुसंधान शिक्षा संबंधी सेवाएं \	
0	administration, regulation & research educational services	
1	11.1	11.2
2	60778	1039026
3	29198	567747
4	26412	510912

	सामाजिक संरक्षण	कुल	item	S.No.		
0	NaN	NaN			NaN	NaN
1	12.0	13.0			2	1
2	493591.0	5456860.0	Current expenditure			1
3	117930.0	2295988.0	consumption Expenditure			1.1
4	40513.0	1874584.0	compensation of Employees			1.1.1

GVA Data:

	Item Description	2011-12	2012-13	2013-14	2014-15
2015-16 \					
0	Gross Value Added	794894	810124	822848	875123
921207					
1	consumption of fixed capital	98623	102211	107181	111909
117267					
2	Net Value Added	696271	707913	715667	763214
803940					
3	central government*	196076	201181	203550	221388
225046					
4	state government	385345	390989	398809	417947
446450					

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
0	998145	1094795	1171388	1222545	1201747	1235990	1310070
1	124093	131115	137992	145239	153141	160876	171288
2	874052	963680	1033396	1077306	1048606	1075114	1138782
3	265516	289744	295104	305293	294045	286830	290766
4	469464	524478	579057	595104	580246	607806	658918

Column Names in GVA Data:

```
Index(['Item Description', '2011-12', '2012-13', '2013-14', '2014-15',
      '2015-16', '2016-17', '2017-18', '2018-19', '2019-20', '2020-21',
      '2021-22', '2022-23'],
      dtype='object')
```

Column Names in Expenditure Data:

```
Index(['क्र.सं.', 'मद', 'सामान्य सार्वजनिक सेवाएं ', 'रक्षा ',
      'सार्वजनिक व्यवस्था और सुरक्षा ', 'आर्थिक कार्य ',
      'सामान्य प्रशासन, विनियमन और अनुसंधान ', 'कृषि, वानिकी और मत्स्यन '],
      dtype='object')
```

```
'खनन, विनिर्माण और निर्माण ', 'बिजली, गैस, भांप और अन्य स्रोत ',
'जलापूर्ति ', 'परिवहन और संचार ', 'अन्य आर्थिक सेवाएं ',
'पर्यावरण संरक्षण ', 'हाउसिंग और सामुदायिक सुविधाएं ', 'स्वास्थ्य ',
'प्रशासन, विनियमन और अनुसंधान ', 'स्वास्थ्य सेवाएं ',
'मनोरंजन, संस्कृति और धर्म ', 'शिक्षा ',
'प्रशासन, विनियमन और अनुसंधान', 'शिक्षा संबंधी सेवाएं ',
'सामाजिक संरक्षण ', 'कुल ', 'item', 'S.No.'],
dtype='object')
```

Summary Statistics for Expenditure Data:

	सामान्य सार्वजनिक सेवाएं	रक्षा \
count	2.400000e+01	24.000000
mean	1.857152e+05	143865.166667
std	2.623540e+05	209592.091943
min	0.000000e+00	0.000000
25%	1.071025e+04	1.000000
50%	8.299400e+04	1706.500000
75%	2.663830e+05	210634.500000
max	1.013362e+06	629863.000000

	सार्वजनिक व्यवस्था और सुरक्षा	आर्थिक कार्य	पर्यावरण संरक्षण \
count	24.000000	24.000000	2.400000e+01
mean	107034.958333	967.583333	3.514173e+05
std	178591.831783	1409.394255	5.640460e+05
min	0.000000	0.000000	0.000000e+00
25%	208.250000	133.500000	6.045225e+04
50%	3643.500000	236.500000	1.541010e+05
75%	117009.250000	2038.500000	3.419295e+05
max	439282.000000	5651.000000	2.431379e+06

	हाउसिंग और सामुदायिक सुविधाएं	स्वास्थ्य \
count	24.000000	24.000000
mean	115046.833333	79626.125000
std	157419.339771	109295.571034
min	0.000000	0.000000
25%	14042.250000	624.750000
50%	51735.000000	34635.500000
75%	167956.500000	125517.500000
max	680662.000000	370386.000000

	मनोरंजन, संस्कृति और धर्म	शिक्षा	सामाजिक संरक्षण \
--	---------------------------	--------	-------------------

count	24.000000	2.400000e+01	24.000000
mean	9290.083333	2.503275e+05	97453.833333
std	11815.862216	3.570640e+05	155777.764852
min	0.000000	0.000000e+00	0.000000
25%	70.000000	1.888000e+03	2444.000000
50%	5441.500000	6.668050e+04	31550.500000
75%	14003.750000	5.100045e+05	104405.250000
max	48023.000000	1.204454e+06	536615.000000

कुल	
count	2.400000e+01
mean	1.340742e+06
std	1.748343e+06
min	1.300000e+01
25%	2.626205e+05
50%	8.562945e+05
75%	1.698378e+06
max	7.359677e+06

Summary Statistics for GVA Data:

	2011-12	2012-13	2013-14	2014-15 \
count	38.000000	38.000000	38.000000	38.000000
mean	70300.105263	71556.578947	72636.105263	77142.289474
std	175575.704687	178731.582763	181288.839693	192841.408559
min	966.000000	1003.000000	1057.000000	1196.000000
25%	6056.000000	5968.250000	6847.500000	7433.000000
50%	13118.000000	13226.500000	13838.500000	15463.500000
75%	26085.500000	26791.750000	27561.750000	27021.750000
max	794894.000000	810124.000000	822848.000000	875123.000000

	2015-16	2016-17	2017-18	2018-19
2019-20 \				
count	38.000000	38.000000	3.800000e+01	3.800000e+01
3.800000e+01				
mean	81389.578947	87889.631579	9.678284e+04	1.040850e+05
1.083553e+05				
std	203136.502306	220255.178391	2.424031e+05	2.600297e+05
2.707933e+05				
min	1206.000000	1140.000000	1.174000e+03	1.519000e+03
1.760000e+03				
25%	7838.250000	8825.250000	9.944000e+03	1.052225e+04
1.005725e+04				
50%	16657.000000	16884.000000	1.953450e+04	2.027850e+04
2.051600e+04				
75%	28851.750000	30430.750000	3.400200e+04	4.078425e+04
4.129175e+04				
max	921207.000000	998145.000000	1.094795e+06	1.171388e+06
1.222545e+06				

2020-21

2021-22

2022-23

count	3.800000e+01	3.800000e+01	3.800000e+01
mean	1.061144e+05	1.093395e+05	1.162589e+05
std	2.648951e+05	2.722782e+05	2.889400e+05
min	1.592000e+03	1.680000e+03	1.787000e+03
25%	1.044625e+04	1.088000e+04	1.173300e+04
50%	2.037100e+04	2.188650e+04	2.330550e+04
75%	4.062450e+04	4.376350e+04	4.831575e+04
max	1.201747e+06	1.235990e+06	1.310070e+06

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2346 (\N{DEVANAGARI LETTER PA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Matplotlib currently does not support Devanagari
natively.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2370 (\N{DEVANAGARI VOWEL SIGN UU}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN ANUSVARA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2368 (\N{DEVANAGARI VOWEL SIGN II}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2340 (\N{DEVANAGARI LETTER TA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from
current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:

```
UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2313 (\N{DEVANAGARI LETTER U}) missing from current
font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2349 (\N{DEVANAGARI LETTER BHA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2379 (\N{DEVANAGARI VOWEL SIGN O}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2327 (\N{DEVANAGARI LETTER GA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2330 (\N{DEVANAGARI LETTER CA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2369 (\N{DEVANAGARI VOWEL SIGN U}) missing from
```

```
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2323 (\N{DEVANAGARI LETTER 0}) missing from current
font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2324 (\N{DEVANAGARI LETTER AU}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2354 (\N{DEVANAGARI LETTER LA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2310 (\N{DEVANAGARI LETTER AA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2341 (\N{DEVANAGARI LETTER THA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2361 (\N{DEVANAGARI LETTER HA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2339 (\N{DEVANAGARI LETTER NNA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2309 (\N{DEVANAGARI LETTER A}) missing from current
font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2335 (\N{DEVANAGARI LETTER TTA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2377 (\N{DEVANAGARI VOWEL SIGN CANDRA 0}) missing
from current font.
```

```

plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2315 (\N{DEVANAGARI LETTER VOCALIC R}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2328 (\N{DEVANAGARI LETTER GHA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:67:
UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2346 (\N{DEVANAGARI LETTER PA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Matplotlib currently does not support
Devanagari natively.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2370 (\N{DEVANAGARI VOWEL SIGN
UU}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN
ANUSVARA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2368 (\N{DEVANAGARI VOWEL SIGN
II}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2340 (\N{DEVANAGARI LETTER TA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)

```



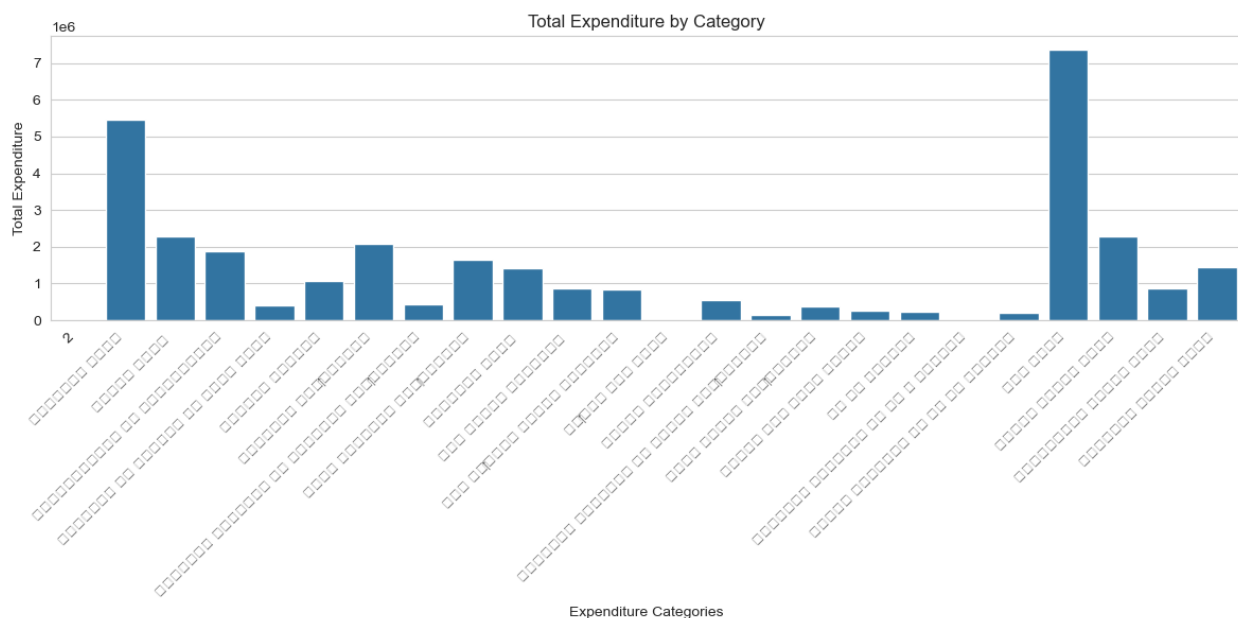
```
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN
VIRAMA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2313 (\N{DEVANAGARI LETTER U})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2349 (\N{DEVANAGARI LETTER BHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2379 (\N{DEVANAGARI VOWEL SIGN
O}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2327 (\N{DEVANAGARI LETTER GA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2330 (\N{DEVANAGARI LETTER CA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN
AA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN
I}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
```

```
pylabtools.py:170: UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2369 (\N{DEVANAGARI VOWEL SIGN
U}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2323 (\N{DEVANAGARI LETTER O})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2324 (\N{DEVANAGARI LETTER AU})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN
E}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2354 (\N{DEVANAGARI LETTER LA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2310 (\N{DEVANAGARI LETTER AA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2341 (\N{DEVANAGARI LETTER THA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2361 (\N{DEVANAGARI LETTER HA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2339 (\N{DEVANAGARI LETTER NNA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2309 (\N{DEVANAGARI LETTER A})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2335 (\N{DEVANAGARI LETTER TTA})
```

```

missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2377 (\N{DEVANAGARI VOWEL SIGN
CANDRA 0}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2315 (\N{DEVANAGARI LETTER
VOCALIC R}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2328 (\N{DEVANAGARI LETTER GHA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)

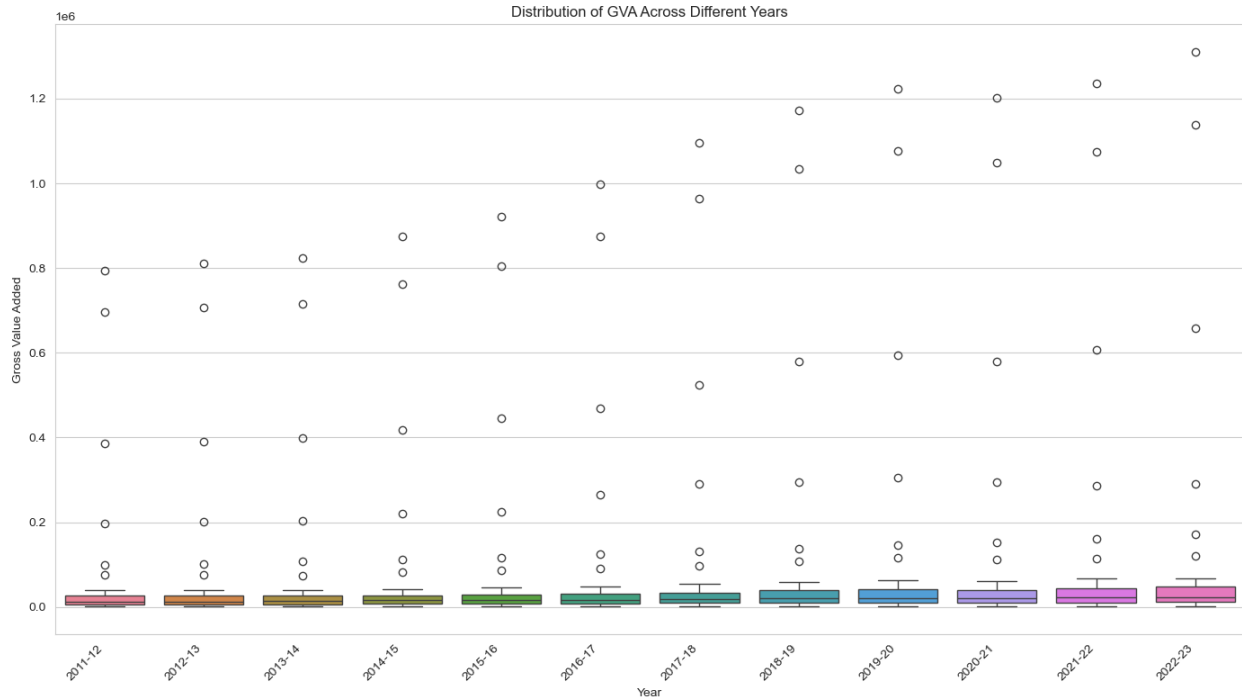
```



```

Error: Required columns for lineplot not found in GVA data.
Error: Required columns for state-wise GVA not found in GVA data.

```



Error: Exactly two valid columns needed for scatter plot

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER ŚA}) missing from current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Matplotlib currently does not support Devanagari natively.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NĀ}) missing from current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from current font.

plt.tight_layout()

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:

UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YĀ}) missing from

```

current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E}) missing from current
font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN ANUSVARA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:149:
UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Matplotlib currently does not support
Devanagari natively.

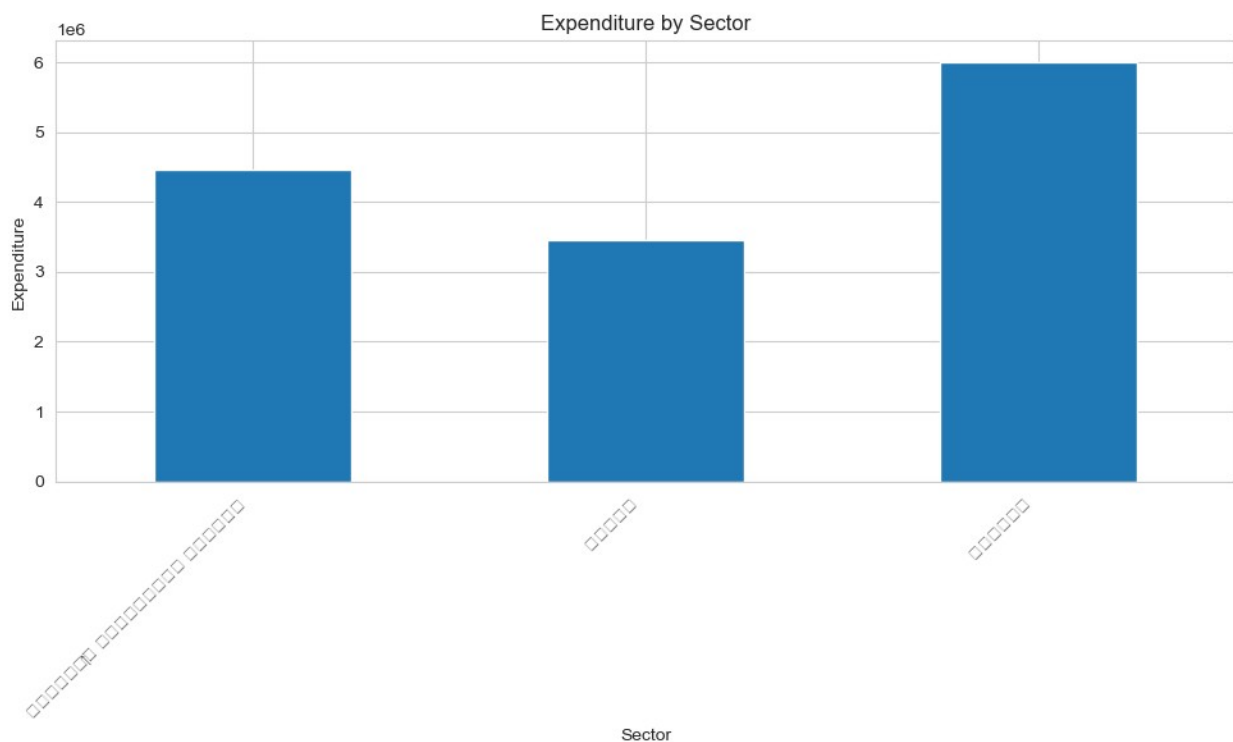
```

```
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN
AA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN
VIRAMA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN
I}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN
E}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
```

```

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN
ANUSVARA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)

```



```

C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Matplotlib currently does not support Devanagari
natively.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:

```

```
UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E}) missing from current
font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN ANUSVARA}) missing from
current font.
    fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA}) missing from
```

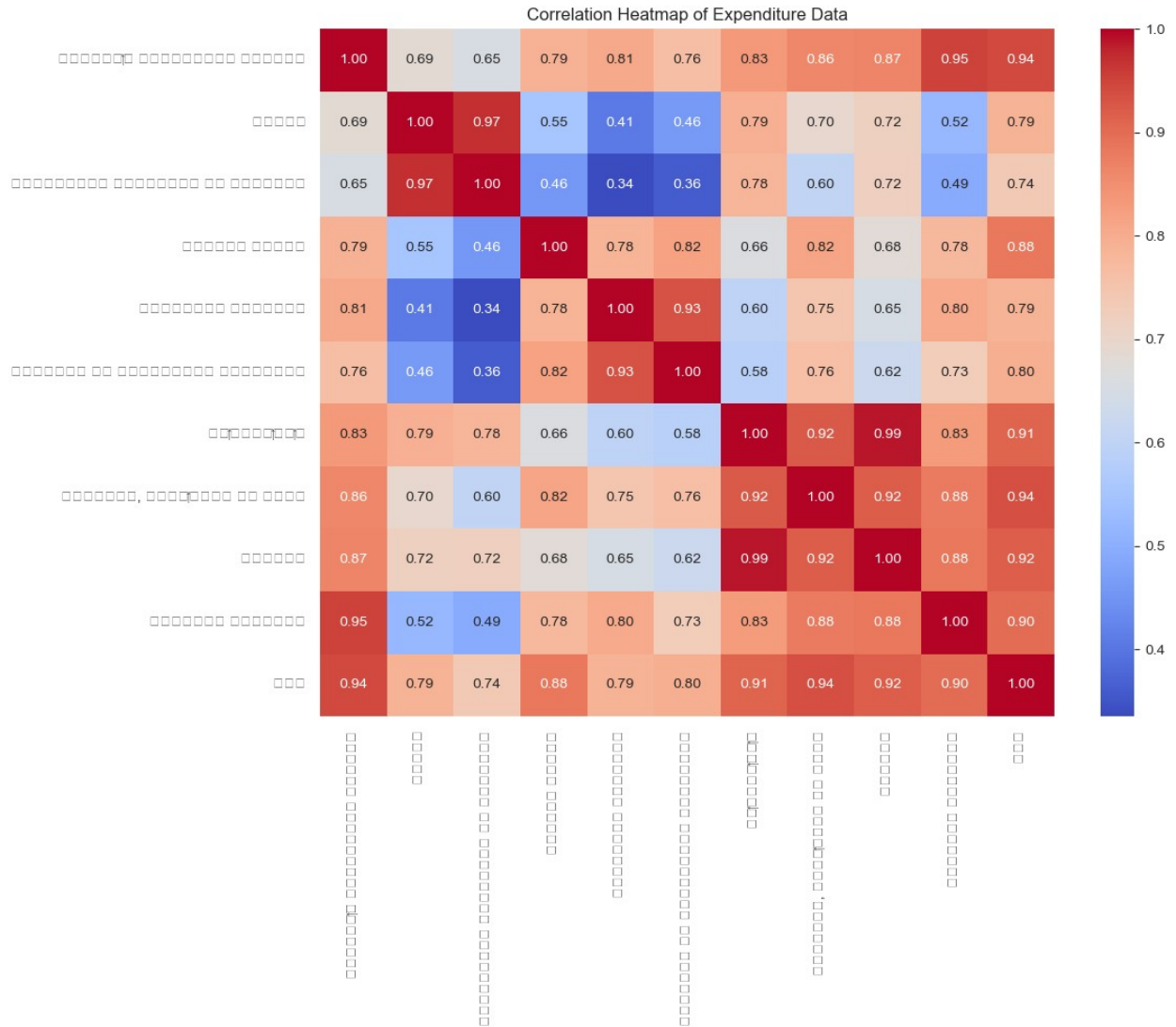


```
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2341 (\N{DEVANAGARI LETTER THA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2324 (\N{DEVANAGARI LETTER AU}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2369 (\N{DEVANAGARI VOWEL SIGN U}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2310 (\N{DEVANAGARI LETTER AA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2346 (\N{DEVANAGARI LETTER PA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2339 (\N{DEVANAGARI LETTER NNA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2361 (\N{DEVANAGARI LETTER HA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2313 (\N{DEVANAGARI LETTER U}) missing from current  
font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2327 (\N{DEVANAGARI LETTER GA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2342 (\N{DEVANAGARI LETTER DA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2343 (\N{DEVANAGARI LETTER DHA}) missing from  
current font.  
    fig.canvas.draw()  
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:  
UserWarning: Glyph 2379 (\N{DEVANAGARI VOWEL SIGN O}) missing from  
current font.
```

```
fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2371 (\N{DEVANAGARI VOWEL SIGN VOCALIC R}) missing
from current font.
fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2340 (\N{DEVANAGARI LETTER TA}) missing from
current font.
fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA}) missing from
current font.
fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\seaborn\utils.py:61:
UserWarning: Glyph 2354 (\N{DEVANAGARI LETTER LA}) missing from
current font.
fig.canvas.draw()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Matplotlib currently does not support
Devanagari natively.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN
AA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN
VIRAMA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
```

```
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN
I}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN
E}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN
ANUSVARA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2341 (\N{DEVANAGARI LETTER THA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2324 (\N{DEVANAGARI LETTER AU})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2369 (\N{DEVANAGARI VOWEL SIGN
U}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2310 (\N{DEVANAGARI LETTER AA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
```

```
pylabtools.py:170: UserWarning: Glyph 2346 (\N{DEVANAGARI LETTER PA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2339 (\N{DEVANAGARI LETTER NNA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2361 (\N{DEVANAGARI LETTER HA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2313 (\N{DEVANAGARI LETTER U})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2327 (\N{DEVANAGARI LETTER GA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2342 (\N{DEVANAGARI LETTER DA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2343 (\N{DEVANAGARI LETTER DHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2379 (\N{DEVANAGARI VOWEL SIGN
O}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2371 (\N{DEVANAGARI VOWEL SIGN
VOCALIC R}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2340 (\N{DEVANAGARI LETTER TA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2354 (\N{DEVANAGARI LETTER LA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
```



```

C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Matplotlib currently does not support Devanagari
natively.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from
current font.
plt.tight_layout()

```

```
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER ÑA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER Ā}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER ṚA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER ṚA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER Ē}) missing from current
font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:181:
UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN ANUSVARA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
```

pylabtools.py:170: UserWarning: Matplotlib currently does not support Devanagari natively.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from current font.

fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from current font.

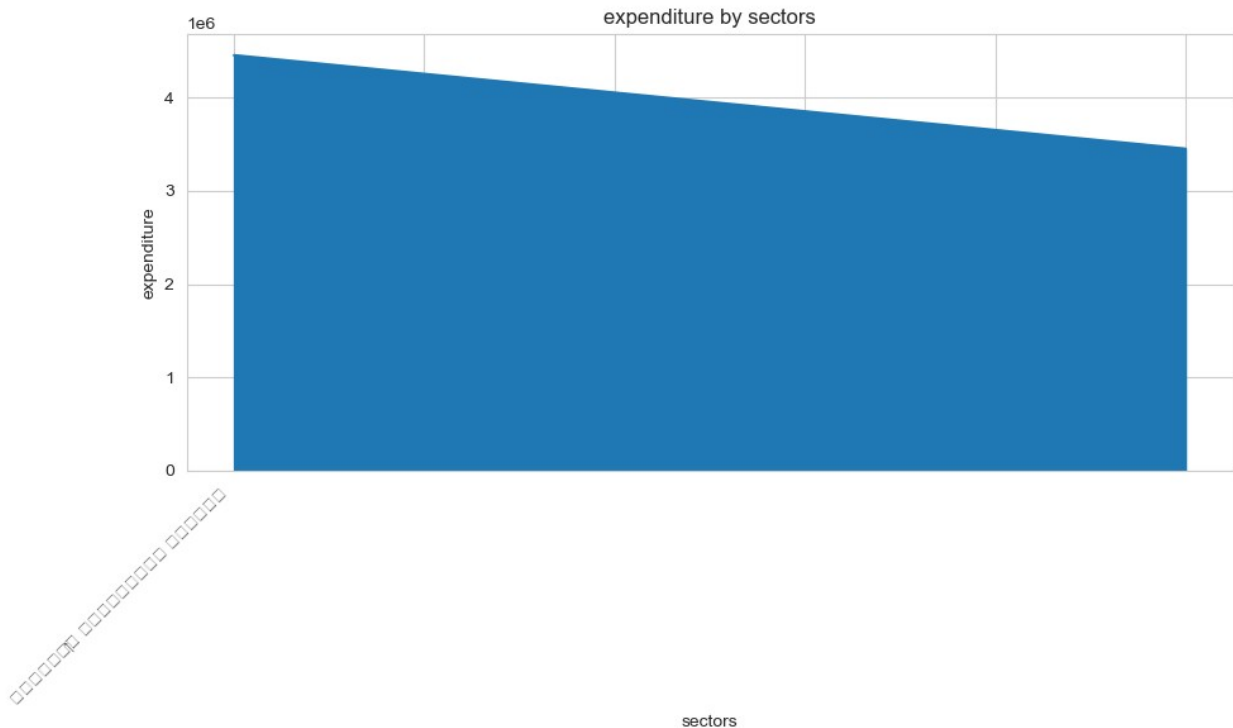
fig.canvas.print_figure(bytes_io, **kw)

C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\pylabtools.py:170: UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E})

```

missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN
ANUSVARA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)

```



```

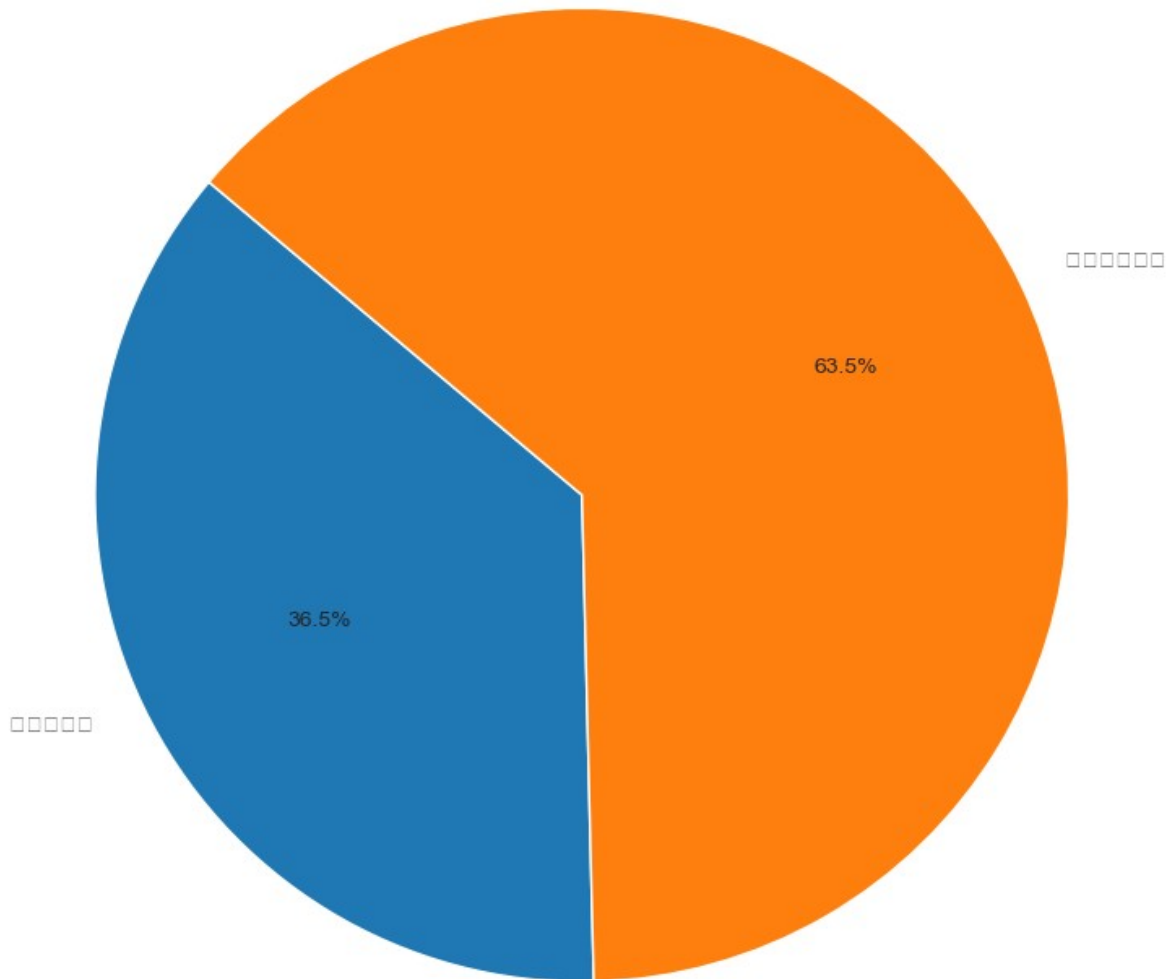
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Matplotlib currently does not support Devanagari
natively.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA}) missing from
current font.

```



```
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:197:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Matplotlib currently does not support
Devanagari natively.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN
VIRAMA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN
AA}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA})
missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN
I}) missing from current font.
fig.canvas.print_figure(bytes_io, **kw)
```

Distribution by expenditure



```
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER ŚA}) missing from
current font.
  plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Matplotlib currently does not support Devanagari
natively.
  plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN AA}) missing from
current font.
```

```
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN VIRAMA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN I}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN E}) missing from
current font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E}) missing from current
font.
plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN ANUSVARA}) missing from
current font.
plt.tight_layout()
```

```
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\AppData\Local\Temp\ipykernel_32556\994452854.py:212:
UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA}) missing from
current font.
    plt.tight_layout()
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2360 (\N{DEVANAGARI LETTER SA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Matplotlib currently does not support
Devanagari natively.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2366 (\N{DEVANAGARI VOWEL SIGN
AA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2350 (\N{DEVANAGARI LETTER MA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2344 (\N{DEVANAGARI LETTER NA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2381 (\N{DEVANAGARI SIGN
VIRAMA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2351 (\N{DEVANAGARI LETTER YA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2352 (\N{DEVANAGARI LETTER RA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2357 (\N{DEVANAGARI LETTER VA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2332 (\N{DEVANAGARI LETTER JA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
```

```

pylabtools.py:170: UserWarning: Glyph 2367 (\N{DEVANAGARI VOWEL SIGN
I}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2325 (\N{DEVANAGARI LETTER KA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2375 (\N{DEVANAGARI VOWEL SIGN
E}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2319 (\N{DEVANAGARI LETTER E})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2306 (\N{DEVANAGARI SIGN
ANUSVARA}) missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2359 (\N{DEVANAGARI LETTER SSA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)
C:\Users\SushilSC\anaconda3\Lib\site-packages\IPython\core\
pylabtools.py:170: UserWarning: Glyph 2358 (\N{DEVANAGARI LETTER SHA})
missing from current font.
    fig.canvas.print_figure(bytes_io, **kw)

```

