Union_Budget_Data_Analytics_Project

- A small and simple data analytics project on finding insights to the Indian union budget of year 2021.

- Each country has a financial budget that describes the government's spending capacity in different sectors of the economy. In this article, I will walk you through the task of financial budget analysis with Python.

- What is a Financial Budget?
  There are so many Data Analysts today that come from a non-coding background. If you are from a commerce background then you may know what is a financial budget. In short, it is a detailed report on the income and expenditure of the government for a financial year.

- In the section below, I will take you through a tutorial on how to perform the task of Financial Budget analysis with Python.

- Financial Budget Analysis with Python
  I hope you now have understood what is a financial budget and when you may need to analyze it as a data analyst. Let's see how we can perform the task of financial budget analysis with Python. I will start this task by importing the necessary Python libraries and a dataset that contains data about the financial budget of India for the year 2021:

- see other files for codes.

- I have used Jupyter Notebook.

- Code snippets along with output:

In [2]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
data = pd.read_csv("india_budget_2021.csv")
data.head()
```

Out[2]:

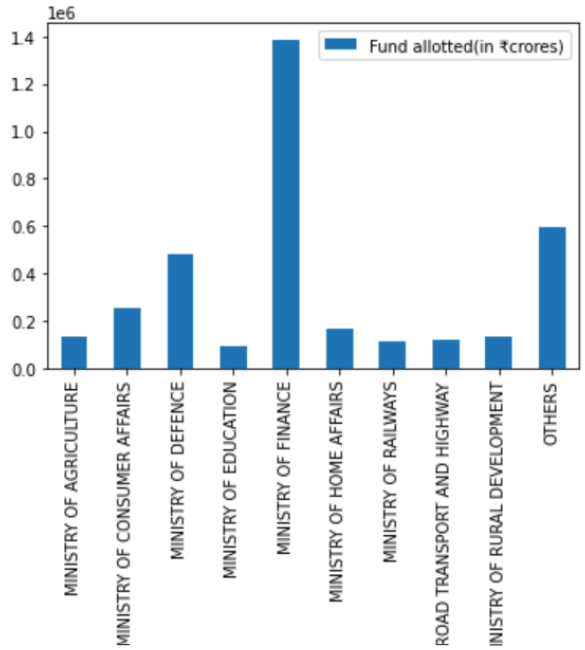
	Department /Ministry	Fund allotted(in ₹crores)
0	MINISTRY OF AGRICULTURE	131531.19
1	DEPARTMENT OF ATOMIC ENERGY	18264.89
2	MINISTRY OF AYURVEDA, YOGA	2970.30
3	MINISTRY OF CHEMICALS AND FERTILISER	80714.94
4	MINISTRY OF CIVIL AVIATION	3224.67

```
data = data.iloc[[0,8,11,14,18,23,41,42,43],:]
row = {'Department /Ministry': 'OTHERS', 'Fund allotted(in ₹crores)': 592971.0800000001}
data = data.append(row, ignore_index = True)
print(data)
```

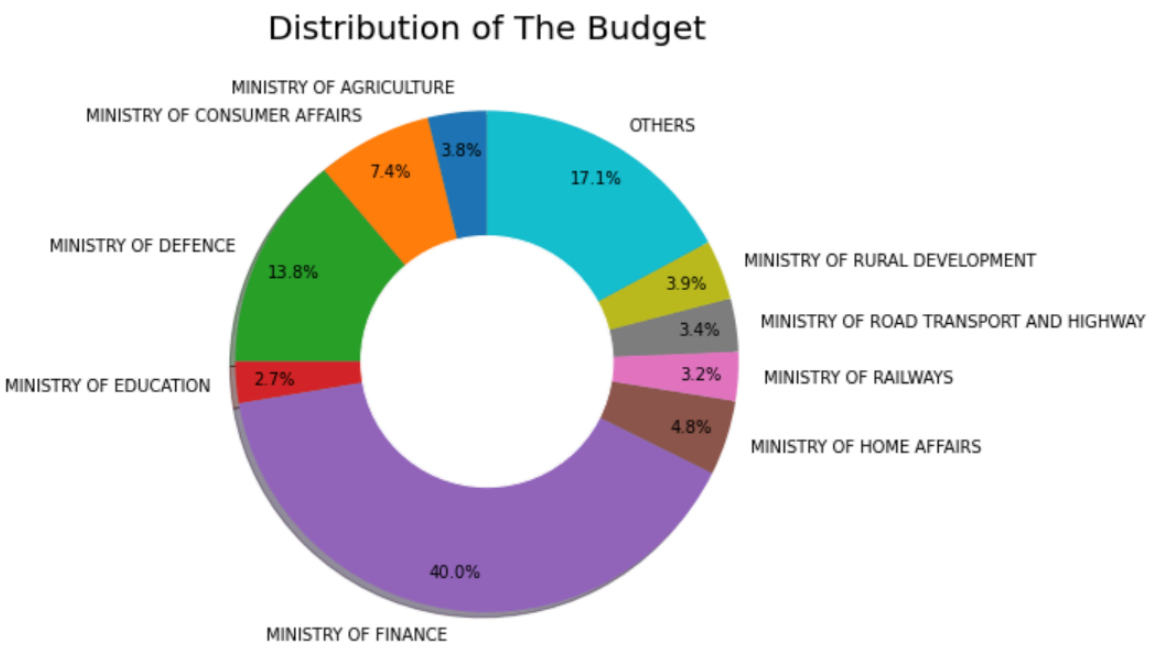
```
                    Department /Ministry  Fund allotted(in ₹crores)
0                  MINISTRY OF AGRICULTURE                  131531.19
1             MINISTRY OF CONSUMER AFFAIRS                  256948.40
2                    MINISTRY OF DEFENCE                  478195.62
3                  MINISTRY OF EDUCATION                   93224.31
4                    MINISTRY OF FINANCE                 1386273.30
5                MINISTRY OF HOME AFFAIRS                  166546.94
6                    MINISTRY OF RAILWAYS                  110054.64
7  MINISTRY OF ROAD TRANSPORT AND HIGHWAY                  118101.00
8           MINISTRY OF RURAL DEVELOPMENT                  133689.50
9                                  OTHERS                  592971.08
```

In [6]:
```
data.plot.bar(x='Department /Ministry', y='Fund allotted(in ₹crores)')
```

Out[6]: <AxesSubplot:xlabel='Department /Ministry'>



In [7]:
```
df = data["Fund allotted(in ₹crores)"]
labels = data["Department /Ministry"]
plt.figure(figsize=(7,7))
plt.pie(df, labels=labels, autopct='%1.1f%%', startangle=90, pctdistance=0.85, shadow =True)
central_circle = plt.Circle((0, 0), 0.5, color='white')
fig = plt.gcf()
fig.gca().add_artist(central_circle)
plt.rc('font', size=12)
plt.title("Distribution of The Budget", fontsize=20)
plt.show()
```


Distribution of The Budget
MINISTRY OF AGRICULTURE
MINISTRY OF CONSUMER AFFAIRS
OTHERS
3.8%
7.4%
17.1%
MINISTRY OF DEFENCE
MINISTRY OF RURAL DEVELOPMENT
13.8%
3.9%
MINISTRY OF ROAD TRANSPORT AND HIGHWAY
3.4%
MINISTRY OF EDUCATION
2.7%
3.2%
MINISTRY OF RAILWAYS
4.8%
MINISTRY OF HOME AFFAIRS
40.0%
MINISTRY OF FINANCE