## DATASCIENCE WITH PYTHON

## PYTHON FOR EVERYONE

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### DATA SCIENCE WITH PYTHON

MAIN PROJECT REPORT

# INTRODUCTION

The Vice President of India is the deputy to the head of state of the Republic of India, i.e. the president of India. The office of vice president is the second-highest constitutional office after the president and ranks second in the order of precedence and first in the line of succession to the presidency. The vice president is also a member of the Parliament of India as the ex officio chairman of the Rajya Sabha. Article 66 of the Constitution of India states the manner of election of the vice president. The vice president is elected indirectly

legislative assembly by the system of proportional representation using single transferable votes and the voting is conducted by Election Commission of India via secret ballot. The vice president also acts as the chancellor of the central universities of India Jagdeep Dhankhar of the Bharatiya Janata Party is the current vice president. He became vice president after defeating

by members of an electoral college consisting of the members of both Houses of Parliament and not the members of state

Indian National Congress candidate Margaret Alva in the 2022 Indian Vice Presidential election

# To be qualified to be elected as Vice President, a person must:

QUALIFICATION

Be a citizen of India.

Be at least 35 years of age.

Not hold any office of profit.

The Vice President must be qualified for election as a member of the Rajya Sabha.

**TERM** 

### The Vice President holds office for five years.

import pandas as pd

import seaborn as sns

import plotly.express as px

import matplotlib.pyplot as plt from scipy.optimize import curve\_fit

import plotly.graph\_objects as go

In [10]: **import** numpy **as** np

In [11]:

IMPORTANCE OF VICE PRESIDENT ELECTION

#### To Succeed to the presidency upon the death or resignation of a president. Moreover, a vice president's only constitutional duty is to preside over the senate. Vice President cannot vote in the senate, except to break a tie, nor

may they formally address the Senate, except with senators' permission. **DATA AND METHODOLOGIES** 

csv\_data\_path = "Vice\_President\_data.csv" In [7]: data= pd.read\_csv(csv\_data\_path) data Out[9]: **Term of office Assumed** Term of office Left Term of office Time in **Election** No. Vice President **Home State** President **Political Party** Office Sarvepalli Radhakrishnan(1888-Tamil Nadu 13 May 1952 12 May 1957 10.000 1952 Rajendra Prasad Independent Sarvepalli Radhakrishnan(1888-Tamil Nadu 13 May 1957 12 May 1962 10.000 1957 Rajendra Prasad Independent 1975) Sarvepalli 2 2 Zakir Husain(1897–1969) Telangana 13 May 1962 12 May 1967 5.000 1962 Independent Radhakrishnan Varahagiri Venkata Giri(1894-3 May 1969 Odisha 13 May 1967 1.355 1967 Zakir Husain Independent 4 Gopal Swarup Pathak(1896–1982) Independent Uttar Pradesh 31 August 1969 30 August 1974 5.000 1969 Varahagiri Venkata 4 Indian National Fakhruddin Ali Ahmed 5 B. D. Jatti(1912-2002) Karnataka 31 August 1974 30 August 1979 5.000 5 1974 Congress Neelam Sanjiva Uttar Pradesh 6 M. Hidayatullah(1905–1992) 31 August 1979 30 August 1984 5.000 1979 Independent 6 Reddy Indian National R. Venkataraman(1910-2009) Giani Zail Singh Tamil Nadu 31 August 1984 24 July 1987 2.327 1984 7 7 Congress Shanker Dayal Sharma(1918-Indian National Madhya 8 3 September 1987 R. Venkataraman 8 24 July 1992 4.325 1987 Pradesh Congress

Indian National Shanker Dayal 24 July 1997 9 K. R. Narayanan(1920-2005) Kerala 21 August 1992 4.337 1992 9 Sharma Congress Janata Dal 10 Krishan Kant(1927-2002) Punjab 21 August 1997 27 July 2002 1997 10 4.340 K. R. Narayanan Bhairon Singh Shekhawat(1923-Bharatiya Janata 11 Rajasthan 19 August 2002 21 July 2007 4.336 A. P. J. Abdul Kalam Indian Nationa Pratibha Devisingh M. Hamid Ansari(1937–) 11 August 2007 10 August 2012 Patil Congress Indian National M. Hamid Ansari(1937-) West Bengal **13** 12 11 August 2012 10 August 2017 10.000 2012 Pranab Mukherjee Congress Bharatiya Janata Andhra Ram Nath Kovind 14 M. Venkaiah Naidu(1949-) 11 August 2017 10 August 2022 5.000 2017 Pradesh Party Bharatiya Janata **15** 14 Raiasthan Jagdeep Dhankhar(1951–) 11 August 2022 Incumbent 0.200 2022 Droupadi Murmu We have use the above data for our main project in which we did analysis on Vice President Data. In which, There are 8 columns and 16 rows. The 8 columns of data are following: ['No.', 'Vice President', 'Home State', 'Term of office Assumed Office', 'Term of office Left Office', 'Term of office Time in

**METHODOLIGIES** We have use pandas and matplotlib libraries to explore the vice president data. We have use pandas to explore the data. We

have use matplotlib to make Pie chart, Histogram, Bar Graph, Sunburst to show visualization of vice President Data.

fig.show()

Observation:

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Observation:

plt.show()

In [17]: fig = px.sunburst(data, path=["President", "Vice President"])

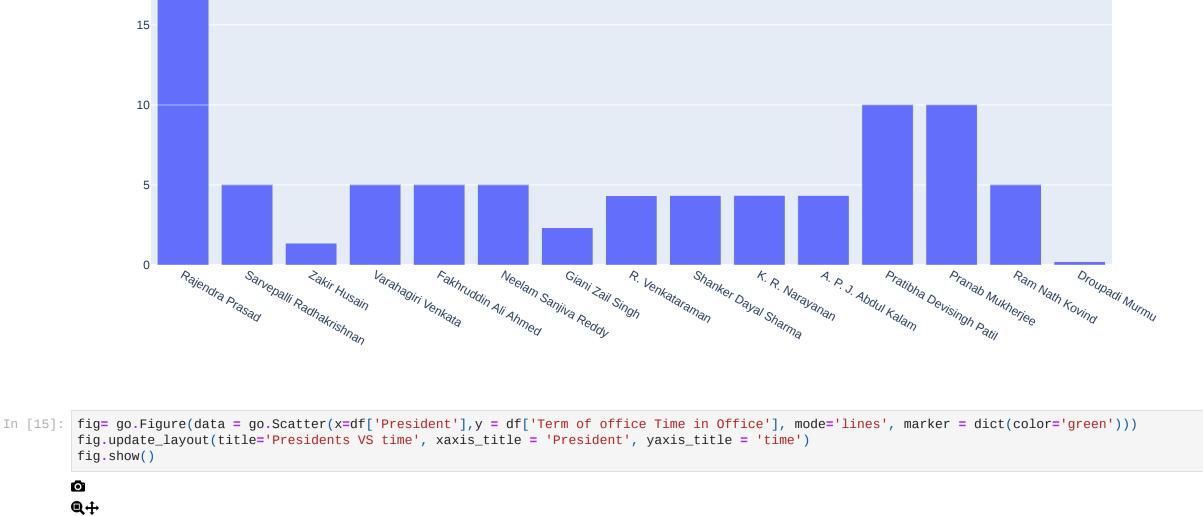
Office', 'Election', 'President', 'Political Party']

In [14]: fig = px.bar(df, x='President', y='Term of office Time in Office')

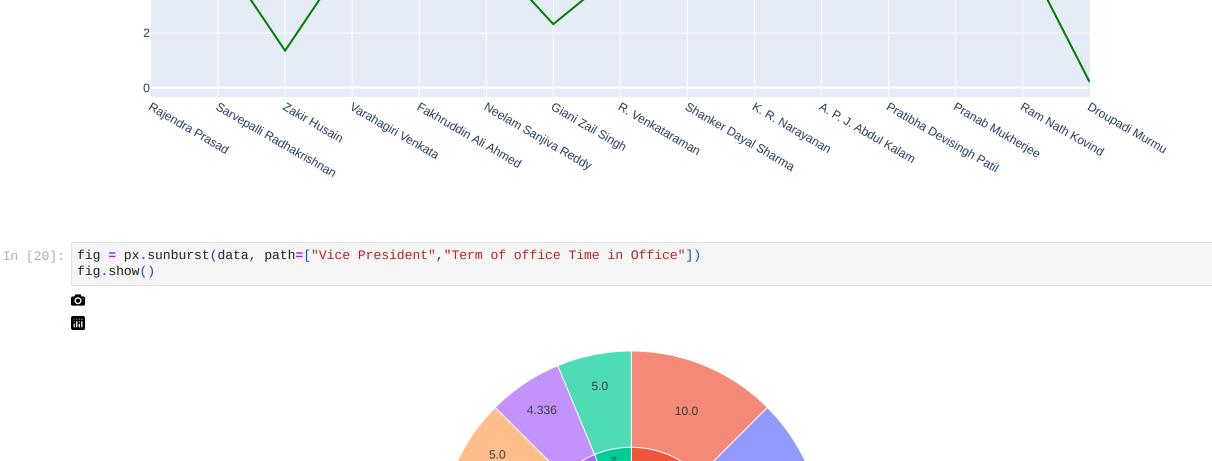
df = pd.DataFrame(data)

**RESULTS AND DISCUSSION** 

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8 6



5.0

1.355

4.325

0.2

4.337

4.34

Sarvepalli Radhakrishnan and M. Hamid Ansari had spent maximum tenure of 10 years in their respective times.

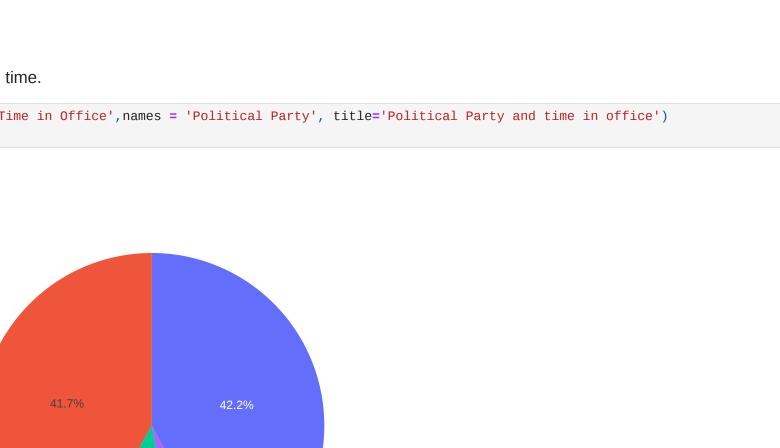
5.0

5.0

2.327

Zakir Husain

Observation: President and Vice President with respective time. In [18]: fig = px.pie(data, values='Term of office Time in Office', names = 'Political Party', title='Political Party and time in office') fig.show()



plt.bar(data['Vice President'], data['Term of office Time in Office']) In [19]: plt.title("Bar Chart") plt.xlabel('Vice President')

From above Pie Chart, It is clear that maximum time independent party had been won the Vice President elections.

11.1%

5.03%

Bar Chart 10 Ferm of office Time in Office

plt.ylabel('Term of office Time in Office')

Sarvepalli Vianti haldi ji shirida 1998 Billi Vice President Observation:

Sarvepalli Radhakrishnan and M. Hamid Ansari had spent maximum tenure of 10 years in their respective times.

**CONCLUSION** 

TIMES.ALSO, WE GOT VICE PRESIDENT MAXIMUM THRICE TIMES FROM STATE TAMIL NADU.SARVEPALLI RADHAKRISHNAN AND M. HAMID ANSARI SERVE THEIR DUTY IN BEST WAY BECAUSE THEY HAD SPENT MAXIMUM TENURE OF 10 YEARS IN THEIR RESPECTIVE TIMES.IN THE PRESENT TIME, DRAUPADI MURMU IS SERVING AS A VICE PRESIDENT OF INDIA.

FROM ABOVE DATA OBSERVATION, WE CONCLUDE THAT FROM TILL NOW INDEPENDENT PARTY WON MAXIMUM