import pandas as pd

## # reading the database

data = pd.read\_csv("stock\_data.csv")

## # printing the top 10 rows

display(data.head(10))

	Unnamed: 0	Date	Open	High	Low	Close	Volume	Name
0	NaN	1/3/2006	39.69	41.22	38.79	40.91	24232729	AABA
1	NaN	1/4/2006	41.22	41.90	40.77	40.97	20553479	AABA
2	NaN	1/5/2006	40.93	41.73	40.85	41.53	12829610	AABA
3	NaN	1/6/2006	42.88	43.57	42.80	43.21	29422828	AABA
4	NaN	1/9/2006	43.10	43.66	42.82	43.42	16268338	AABA
5	NaN	1/10/2006	42.96	43.34	42.34	42.98	16288580	AABA
6	NaN	1/11/2006	42.19	42.31	41.72	41.87	26192772	AABA
7	NaN	1/12/2006	41.92	41.99	40.76	40.89	18921686	AABA
8	NaN	1/13/2006	41.00	41.08	39.62	39.90	30966185	AABA
9	NaN	1/17/2006	39.09	40.39	38.96	40.11	42429911	AABA

import pandas as pd

import matplotlib.pyplot as plt

#### # reading the database

data = pd.read\_csv("stock\_data.csv")

## # Scatter plot with day against tip

plt.scatter(data['Open'], data['Close'])

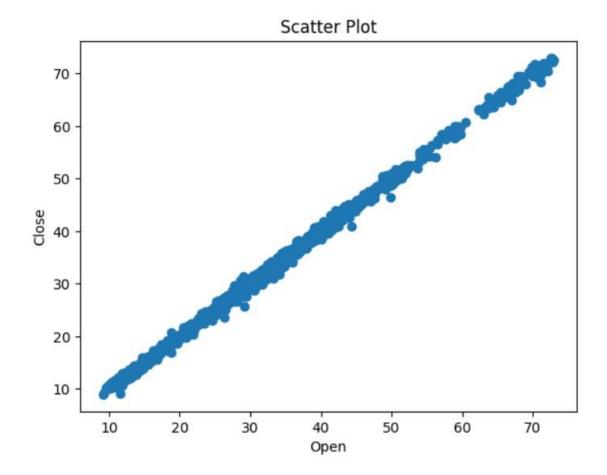
## # Adding Title to the Plot

plt.title("Scatter Plot")

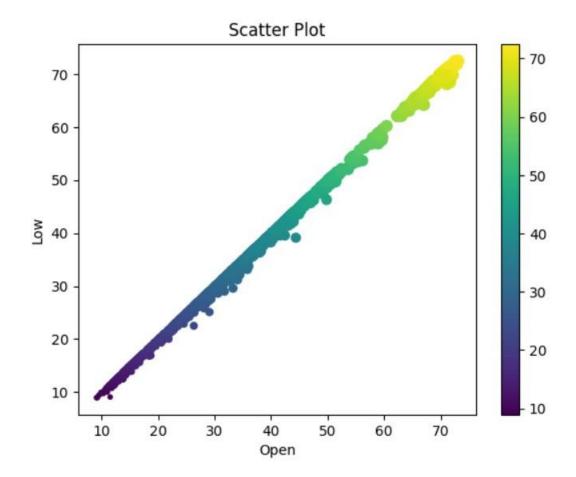
## # Setting the X and Y labels

plt.xlabel('Open')

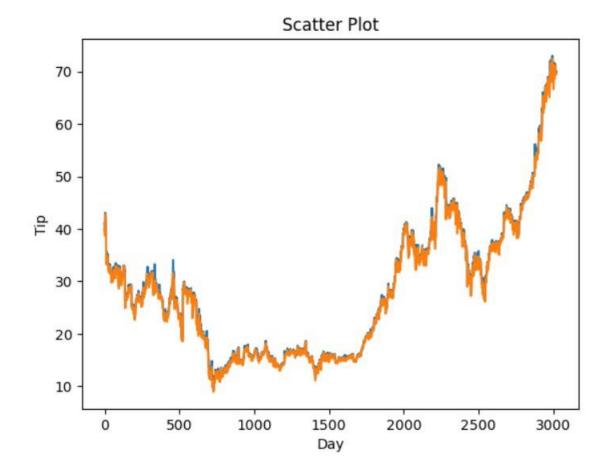
plt.ylabel('Close')



import pandas as pd
import matplotlib.pyplot as plt
# reading the database
data = pd.read\_csv("stock\_data.csv")
# Scatter plot with day against tip
plt.scatter(data['Open'], data['Low'], c=data['Low'], s=data['Close'])
# Adding Title to the Plot
plt.title("Scatter Plot")
# Setting the X and Y labels
plt.xlabel('Open')
plt.ylabel('Low')
plt.colorbar()



import pandas as pd
import matplotlib.pyplot as plt
# reading the database
data = pd.read\_csv("stock\_data.csv")
# Scatter plot with day against tip
plt.plot(data['Open'])
plt.plot(data['Low'])
# Adding Title to the Plot
plt.title("Scatter Plot")
# Setting the X and Y labels
plt.xlabel('Day')
plt.ylabel('Tip')



import pandas as pd

import matplotlib.pyplot as plt

## # reading the database

data = pd.read\_csv("stock\_data.csv")

## # Bar chart with day against tip

plt.bar(data['Date'], data['Open'])

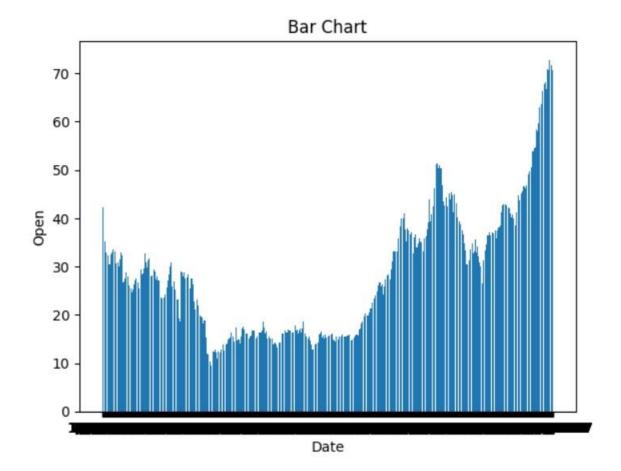
plt.title("Bar Chart")

## # Setting the X and Y labels

plt.xlabel('Date')

plt.ylabel('Open')

## # Adding the legends



import pandas as pd

import matplotlib.pyplot as plt

## # reading the database

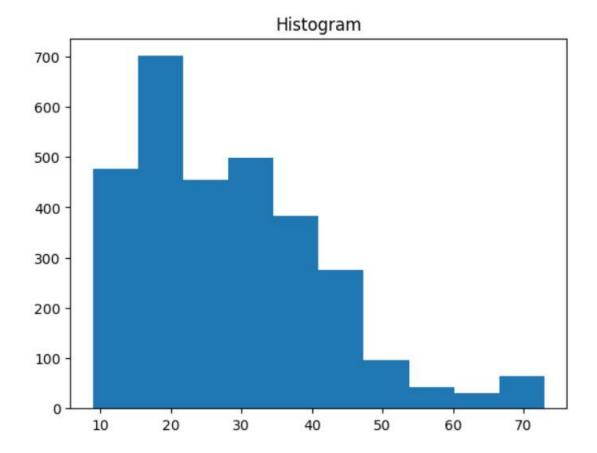
data = pd.read\_csv("stock\_data.csv")

## # histogram of total\_bills

plt.hist(data['Close'])

plt.title("Histogram")

# # Adding the legends



%pip install seaborn

import seaborn as sns

import matplotlib.pyplot as plt

import pandas as pd

## # importing packages

import seaborn as sns

import matplotlib.pyplot as plt

import pandas as pd

#### # reading the database

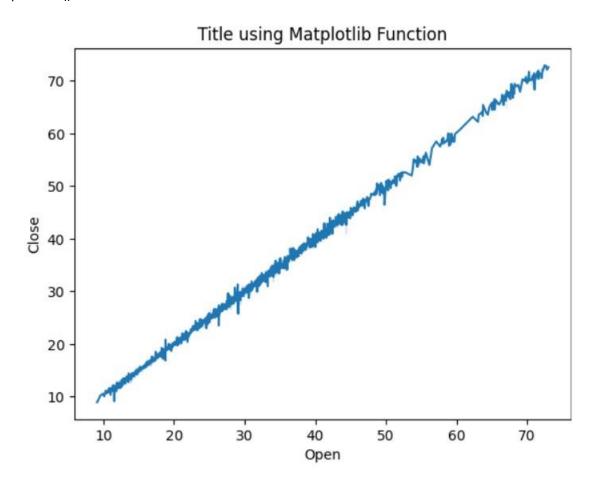
data = pd.read\_csv("stock\_data.csv")

## # draw lineplot

sns.lineplot(x="Open", y="Close", data=data)

#### # setting the title using Matplotlib

plt.title('Title using Matplotlib Function')
plt.show()



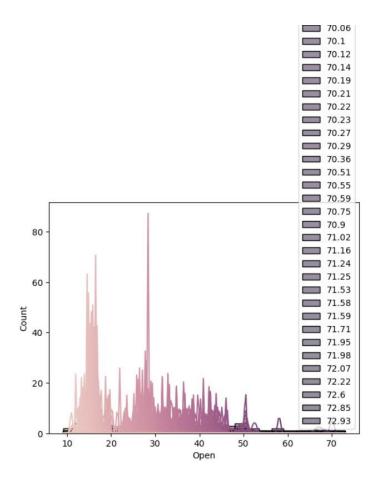
## # reading the database

data = pd.read\_csv("stock\_data.csv")
sns.histplot(x='Open', data=data, kde=True, hue='Close')
plt.show()

/lib/python3.11/site-packages/IPython/core/pylabtools.py:152: UserWarning: Creating legend with loc="best" can be slow with large amounts of data.

fig.canvas.print\_figure(bytes\_io, \*\*kw)

Close 8.95 9.14 9.39 10.07 10.21 10.34 10.58 10.63 10.74 10.82 **11.01** 11.05 11.09 11.15 11.17 11.28 11.32 11.34 11.35 11.5 11.51 11.55 11.58 11.59 11.61 11.66 11.73 11.74 **11.75 11.77** 11.87



#### # importing the modules

import bokeh

from bokeh.plotting import figure, output\_file, show

import pandas as pd

#### # instantiating the figure object

graph = figure(title = "Bokeh Bar Chart")

#### # reading the database

data = pd.read\_csv("stock.csv")

#### # Count of each unique value of tip column

df = data['Open'].value\_counts()

#### # plotting the graph

graph.line(df, data['Open'])

#### # displaying the model

show(graph)

```
ModuleNotFoundError
                                          Traceback (most recent call last)
Cell In[10], line 3
     1 # importing the modules
     2 import bokeh
----> 3 from bokeh.plotting import figure, output_file, show
     4 import pandas as pd
     5 # instantiating the figure object
File /lib/python3.11/site-packages/bokeh/plotting/__init__.py:56
    26 __all__ = (
27 'column',
28 'Column',
   (...)
          'show',
    46 )
    48 #--
    49 # Private API
    50 #-----
   (...)
53 # General API
     54 #----
---> 56 from ._figure import figure
     57 from ._figure import markers
     58 from ._figure import DEFAULT_TOOLS
{\tt File~/lib/python3.11/site-packages/bokeh/plotting/\_figure.py:47}
     28 from ...core.enums import HorizontalLocation, MarkerType, VerticalLocation
     29 from ..core.properties import (
     30
           Auto,
    31
          Datetime,
   (...)
     45
          Tuple,
    46 )
---> 47 from ..models import (
          ColumnDataSource,
    48
           CoordinateMapping,
     49
          DataRange1d,
     50
    51 GraphRenderer,
52 Plot,
53 Range,
54 Scale,
    55
           Tool,
    56 )
    57 from ..models.dom import Template
    58 from ..models.tools import (
    59 Drag,
60 GestureTool,
  63
         Tap,
    64 )
File /lib/python3.11/site-packages/bokeh/models/__init__.py:33
    27 #--
    28 # Imports
    29 #---
    30
    31 # Bokeh imports
    32 from ..model import Model
 --> 33 from . import (
    34 annotations,
    35
          axes,
    36
         callbacks,
    37
          canvas,
    38
          coordinates.
    39
          css,
    40
           expressions,
    41
           filters,
    42
           formatters,
    43
           glyphs,
    44
45
           graphs,
           grids,
    46
           labeling,
    47
           layouts,
    48
           map_plots,
    49
           mappers,
plots,
    50
    51
           ranges,
    52
           renderers,
    53
           scales.
           selections,
    55
           selectors,
    56
           sources,
    57
          text,
```

```
58 textures,
    59 tickers,
60 tiles,
61 tools,
     62 transforms,
         ui,
     63
     64
          widgets,
     65 )
     66 from .annotations import *
     67 from .axes import *
File /lib/python3.11/site-packages/bokeh/models/map_plots.py:45
     43 from ..model import Model
    44 from ..models.ranges import Rangeld
---> 45 from .plots import Plot
     47 #----
    48 # Globals and constants
    49 #-----
    51 _all_ = (
52 'GMapOptions',
53 'GMapPlot',
54 'MapOptions',
55 'MapPlot',
     56 )
File /lib/python3.11/site-packages/bokeh/models/plots.py:33
    25 from typing import (
    26 Any,
27 Generator,
        Literal,
     28
     29
         overload,
     30 )
    32 # External imports
---> 33 import xyzservices
    35 # Bokeh imports
    36 from ..core.enums import (
    37 Location,
    38
         OutputBackend,
  (...)
41 ResetPolicy,
    42 )
ModuleNotFoundError: No module named 'xyzservices'
```