```
pip install pandas
```

```
Requirement already satisfied: pandas in /usr/local/lib/python3.12/dist-packages (2.2.2)
Requirement already satisfied: numpy>=1.26.0 in /usr/local/lib/python3.12/dist-packages (from pandas) (2.0.2)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.12/dist-packages (from pandas) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.12/dist-packages (from pandas) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.12/dist-packages (from pandas) (2025.2)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.12/dist-packages (from python-dateutil>=2.8.2->pandas) (1.1
```

```
import pandas as pd
```

```
df = pd.read_csv("/content/BTC-USD.csv")
```

```
df.head()
```

	Date	Open	High	Low	Close	Adj Close	Volume
0	2014-09-17	465.864014	468.174011	452.421997	457.334015	457.334015	21056800
1	2014-09-18	456.859985	456.859985	413.104004	424.440002	424.440002	34483200
2	2014-09-19	424.102997	427.834991	384.532013	394.795990	394.795990	37919700
3	2014-09-20	394.673004	423.295990	389.882996	408.903992	408.903992	36863600
4	2014-09-21	408.084991	412.425995	393.181000	398.821014	398.821014	26580100

Next steps: Generate code with df | New interactive sheet

```
print(df.info())       # Column data types
print(df.describe())   # Summary stats
```

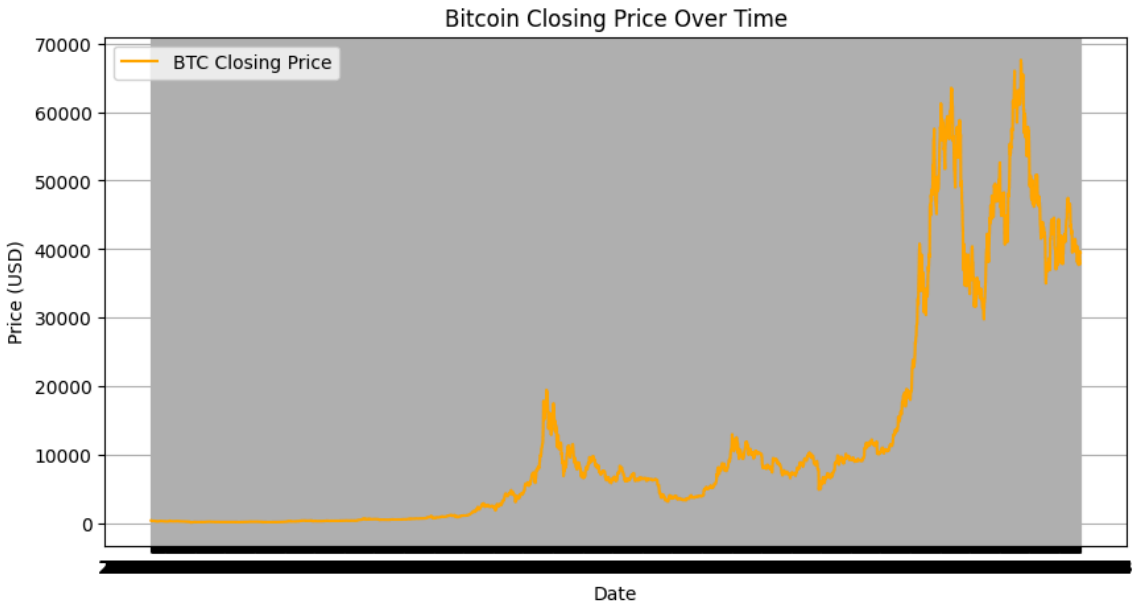
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2788 entries, 0 to 2787
Data columns (total 7 columns):
 #   Column     Non-Null Count  Dtype
---  ------     --------------  -----
 0   Date       2788 non-null   object
 1   Open       2788 non-null   float64
 2   High       2788 non-null   float64
 3   Low        2788 non-null   float64
 4   Close      2788 non-null   float64
 5   Adj Close  2788 non-null   float64
 6   Volume     2788 non-null   int64
dtypes: float64(5), int64(1), object(1)
memory usage: 152.6+ KB
None
                Open          High           Low         Close     Adj Close  \
count   2788.000000   2788.000000   2788.000000   2788.000000   2788.000000
mean   12114.051628  12432.075536  11764.920824  12126.416572  12126.416572
std    16612.538889  17044.777808  16119.346993  16615.381435  16615.381435
min      176.897003    211.731003    171.509995    178.102997    178.102997
25%      612.573471    618.876495    609.665756    613.742477    613.742477
50%     6457.810059   6549.650147   6353.985107   6466.239990   6466.239990
75%    11024.040039  11388.611572  10722.320557  11056.325195  11056.325195
max    67549.734375  68789.625000  66382.062500  67566.828125  67566.828125

             Volume
count  2.788000e+03
mean   1.504640e+10
std    1.988339e+10
min    5.914570e+06
25%    8.317548e+07
50%    5.401853e+09
75%    2.558002e+10
max    3.509679e+11
```

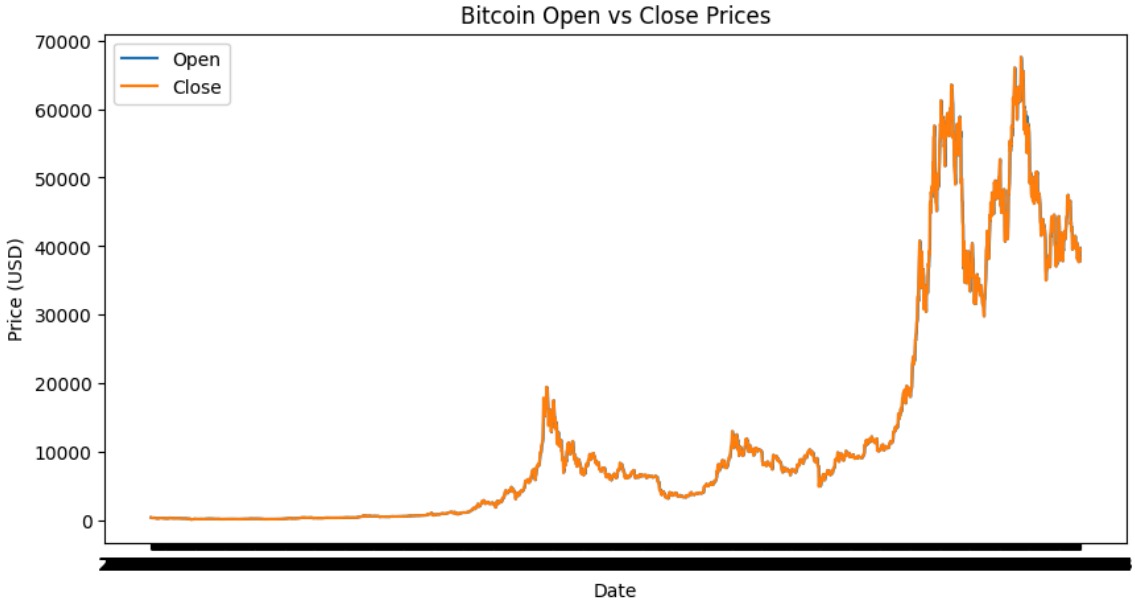
```
import matplotlib.pyplot as plt
```

```
plt.figure(figsize=(10,5))
plt.plot(df["Date"], df["Close"], label="BTC Closing Price", color='orange')
plt.xlabel("Date")
plt.ylabel("Price (USD)")
plt.title("Bitcoin Closing Price Over Time")
```

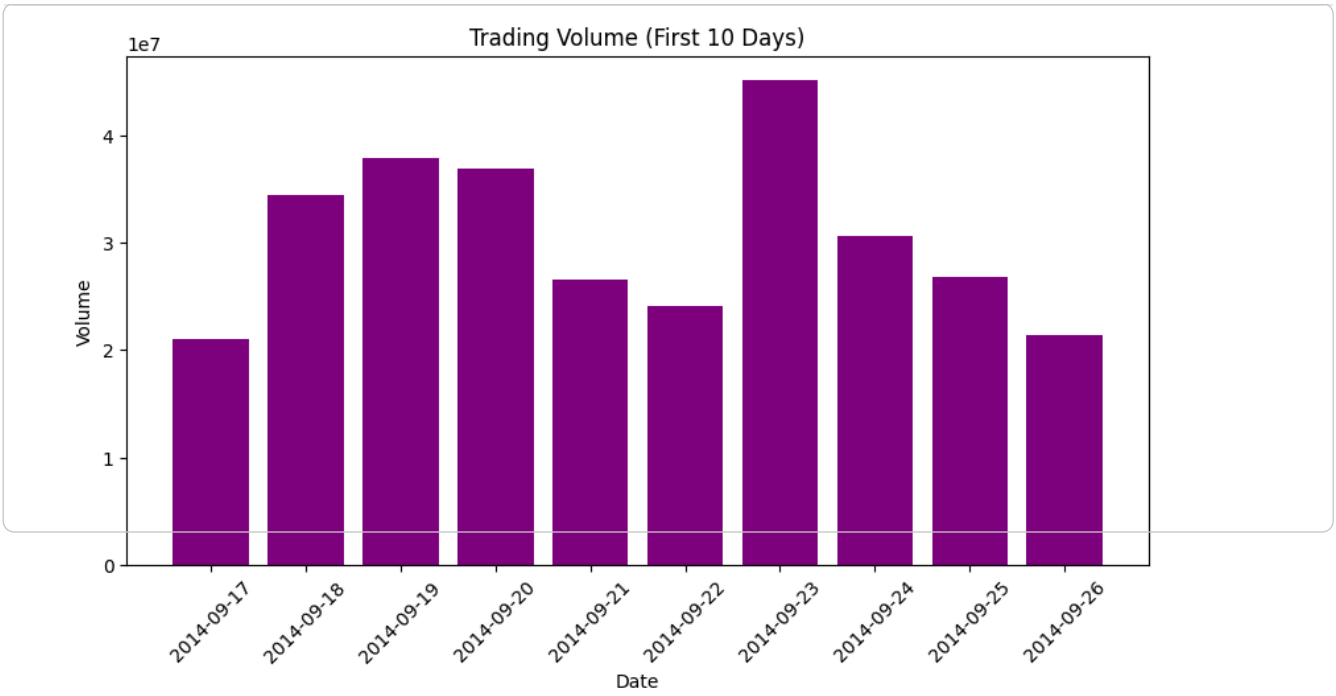
```
plt.legend()
plt.grid(True)
plt.show()
```




```
plt.figure(figsize=(10,5))
plt.plot(df["Date"], df["Open"], label="Open")
plt.plot(df["Date"], df["Close"], label="Close")
plt.xlabel("Date")
plt.ylabel("Price (USD)")
plt.title("Bitcoin Open vs Close Prices")
plt.legend()
plt.show()
```




```
plt.figure(figsize=(10,5))
plt.bar(df["Date"].head(10), df["Volume"].head(10), color='purple')
plt.xlabel("Date")
plt.ylabel("Volume")
plt.title("Trading Volume (First 10 Days)")
plt.xticks(rotation=45)
plt.show()
```


Trading Volume (First 10 Days)
1e7
Volume
0
1
2
3
4
2014-09-17
2014-09-18
2014-09-19
2014-09-20
2014-09-21
2014-09-22
2014-09-23
2014-09-24
2014-09-25
2014-09-26
Date