

# FIN3210 Week 7 Assignment

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```
[1]: import os
import glob
import pandas as pd
import matplotlib.pyplot as plt
from matplotlib.pyplot import MultipleLocator
```

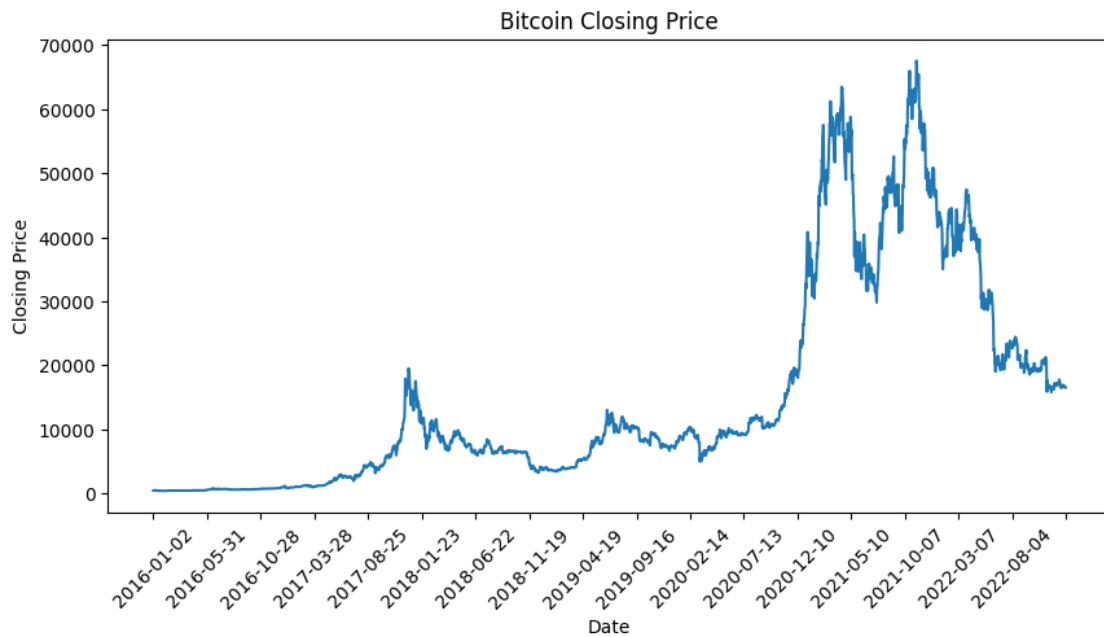
```
[2]: # Generate concatenated csv files for each cryptocurrency
btcfiles = glob.glob('Bitcoin/*.csv')
count = 0
for file in btcfiles:
    df = pd.read_csv(file, sep = ';')
    if count == 0:
        result = df
    else:
        result = pd.concat([result, df])
    count += 1
result.sort_values(by = 'timeOpen', inplace = True)
result.to_csv('Bitcoin.csv', index = False)
```

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[3]: ethfiles = glob.glob('Ethereum/*.csv')
count = 0
for file in ethfiles:
    df = pd.read_csv(file, sep = ';')
    if count == 0:
        result = df
    else:
        result = pd.concat([result, df])
    count += 1
result.sort_values(by = 'timeOpen', inplace = True)
result.to_csv('Ethereum.csv', index = False)
```

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[4]: btc = pd.read_csv('Bitcoin.csv')
eth = pd.read_csv('Ethereum.csv')
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[5]: plt.figure(figsize = (10, 5))
plt.plot(pd.to_datetime(btc['timeOpen']).dt.strftime('%Y-%m-%d'), btc['close'])
plt.xlabel('Date')
plt.ylabel('Closing Price')
```

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plt.xticks(rotation = 45)
x_major_locator=MultipleLocator(150)
ax = plt.gca()
ax.xaxis.set_major_locator(x_major_locator)
plt.gcf().subplots_adjust(bottom=0.15)
plt.title('Bitcoin Closing Price')
plt.show()
```



```
[6]: plt.figure(figsize = (10, 5))
plt.plot(pd.to_datetime(eth['timeOpen']).dt.strftime('%Y-%m-%d'), eth['close'])
plt.xlabel('Date')
plt.ylabel('Closing Price')
plt.xticks(rotation = 45)
x_major_locator=MultipleLocator(150)
ax = plt.gca()
ax.xaxis.set_major_locator(x_major_locator)
plt.gcf().subplots_adjust(bottom=0.15)
plt.title('Ethereum Closing Price')
plt.show()
```

