Session 31

Project Question

Session 31: Project

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1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

2. Problem Statement

Dataset Link

https://drive.google.com/file/d/1pP0Rr83ri0voscgr95-YnVCBv6BYV22w/view

Hint:

```
In [1]: import pandas as pd
        import numpy as np
        import matplotlib.pyplot as plt
        %matplotlib inline

In [2]: data = pd.read_csv('/Users/pradmishra/Documents/data_stocks.csv')

In [3]: data.head()
```

Out[3]:

	DATE	SP500	NASDAQ.AAL	NASDAQ.AAPL	NASDAQ.ADBE	NASDAQ.ADI	NASDAQ.ADP	NASDAQ.ADSK	NASDAQ.AKAM	NASDA
0	1491226200	2363.6101	42.3300	143.6800	129.6300	82.040	102.2300	85.2200	59.760	121.52
1	1491226260	2364.1001	42.3600	143.7000	130.3200	82.080	102.1400	85.6500	59.840	121.48
2	1491226320	2362.6799	42.3100	143.6901	130.2250	82.030	102.2125	85.5100	59.795	121.93
3	1491226380	2364.3101	42.3700	143.6400	130.0729	82.000	102.1400	85.4872	59.620	121.44
4	1491226440	2364.8501	42.5378	143.6600	129.8800	82.035	102.0600	85.7001	59.620	121.60

5 rows × 502 columns

Problem 1:

There are various stocks for which we have collected a data set, which all stocks are apparently similar in performance

Problem 2:

How many Unique patterns that exist in the historical stock data set, based on fluctuations in price.

Problem 3:

Identify which all stocks are moving together and which all stocks are different from each other.

NOTE: The solution shared through Github should contain the source code used and the screenshot of the output.

3. Output

N/A