

## WSC Analytics Challenge

1) Read nifty50.csv file using pandas. Calculate the daily returns compared to the previous day close. Write a function called get\_outliers. It takes two parameters. Dataframe and column of dataframe on which the outlier detection has to be performed. Outliers are calculated based on movement above or below +/-5%. Filter the dataframe which contains outlier entries. (nifty50.csv)

2) You are initially given a list of dictionaries for different stocks. Based on this list you compute the daily percentage for each stock.

```
old_values = [  
    {'close': 99.03, 'high': 99.03, 'low': 96.03, 'name': 'S1', 'open': 97.24},  
    {'close': 209.48, 'high': 209.48, 'low': 203.77, 'name': 'S2', 'open': 203.77},  
    {'close': 313.88, 'high': 313.88, 'low': 300.75, 'name': 'S3', 'open': 308.8},  
    {'close': 392.5, 'high': 392.5, 'low': 385.65, 'name': 'S4', 'open': 385.65},  
    {'close': 501.84, 'high': 517.13, 'low': 501.84, 'name': 'S5', 'open': 512.77},  
    {'close': 602.96, 'high': 616.22, 'low': 602.63, 'name': 'S6', 'open': 606.35},  
    {'close': 696.38, 'high': 696.38, 'low': 673.23, 'name': 'S7', 'open': 673.23},  
    {'close': 830.77, 'high': 830.77, 'low': 802.19, 'name': 'S8', 'open': 811.98},  
    {'close': 878.27, 'high': 878.27, 'low': 857.41, 'name': 'S9', 'open': 861.38}  
]
```

Plot the high as well.

3) Plot the 5 day simple moving average on the closing price in the given file (3131.csv)