Task :

1. Attached Bank Nifty time series data of 1 min.
2. Backtest using Python.
3. Convert data into 15 min time frame.
4. Intraday trades are to be taken and mandatorily closed in the same day.
5. Trade starts only after 2nd 15-minute candle (9:30 to 9:45)
6. If candle closes above VWAP, we will buy and if candle closes below VWAP, we will sell
7. Example: If 2nd candle is closing above VWAP, we will buy 1 tick above candle high and Stop Loss (SL) will be 1 tick below candle low.
8. If stop loss is not hit, then all trades are exited at 3:15 PM.
9. Calculate the overall profit and loss.
10. Segregate the Profit and Loss Year wise and Day wise
11. Suggest best performing Year.
12. Use VWAP Code :

def calculateVwap(data):

data['TP'] = (data['High']+data['Low']+data['Close'])/3.0

data['TradedValue'] = data['TP']\*data['Volume']

data['CumVolume'] = data['Volume'].cumsum()

data['CumTradedValue'] = data['TradedValue'].cumsum()

data['VWAP'] = data['CumTradedValue'] /data['CumVolume']

return data

df = df.groupby('dt').apply(calculateVwap)