import glob

#import os

import pandas as pd

colnames=['Ticker', 'Date', 'Open', 'High', 'Low', 'Close', 'Volume']

def pivotAndInterpolate(row,index,column,reIndex, interpolater,limiter, df):

dfOut = df.pivot\_table(row, index, column)

dfOut.index = pd.to\_datetime(dfOut.index, format='%Y%m%d')

dfOut = dfOut.reindex(reIndex)

dfOut=dfOut.interpolate(method=interpolater, limit\_area=limiter)

dfOut=dfOut.fillna(0)

return dfOut

all\_files = glob.glob('C:/QM/rnd/ASX-2015-2018/ASX-2015-2018/2\*.txt') # advisable to use os.path.join as this makes concatenation OS independent

df\_from\_each\_file = (pd.read\_csv(f, names=colnames, header=None, encoding='utf-8') for f in all\_files)

data = pd.concat(df\_from\_each\_file, ignore\_index=True, sort=True)

data['HighLow'] = data['High']/data['Low']

index = pd.date\_range('20150102','20180629')

dfOpen=pivotAndInterpolate('Open', ['Date'], 'Ticker',index, 'linear','inside', data)

dfLow=pivotAndInterpolate('High', ['Date'], 'Ticker',index, 'linear','inside',data)

dfHigh=pivotAndInterpolate('Low', ['Date'], 'Ticker',index, 'linear','inside',data)

dfClose=pivotAndInterpolate('Close', ['Date'], 'Ticker',index, 'linear','inside',data)

dfVolume=pivotAndInterpolate('Volume', ['Date'], 'Ticker',index, 'linear','inside',data)

dfHighLow=pivotAndInterpolate('HighLow', ['Date'], 'Ticker',index, 'linear','inside',data)

dfCloseReturns=dfClose/dfClose.shift(1) - 1 #Close to close Returns