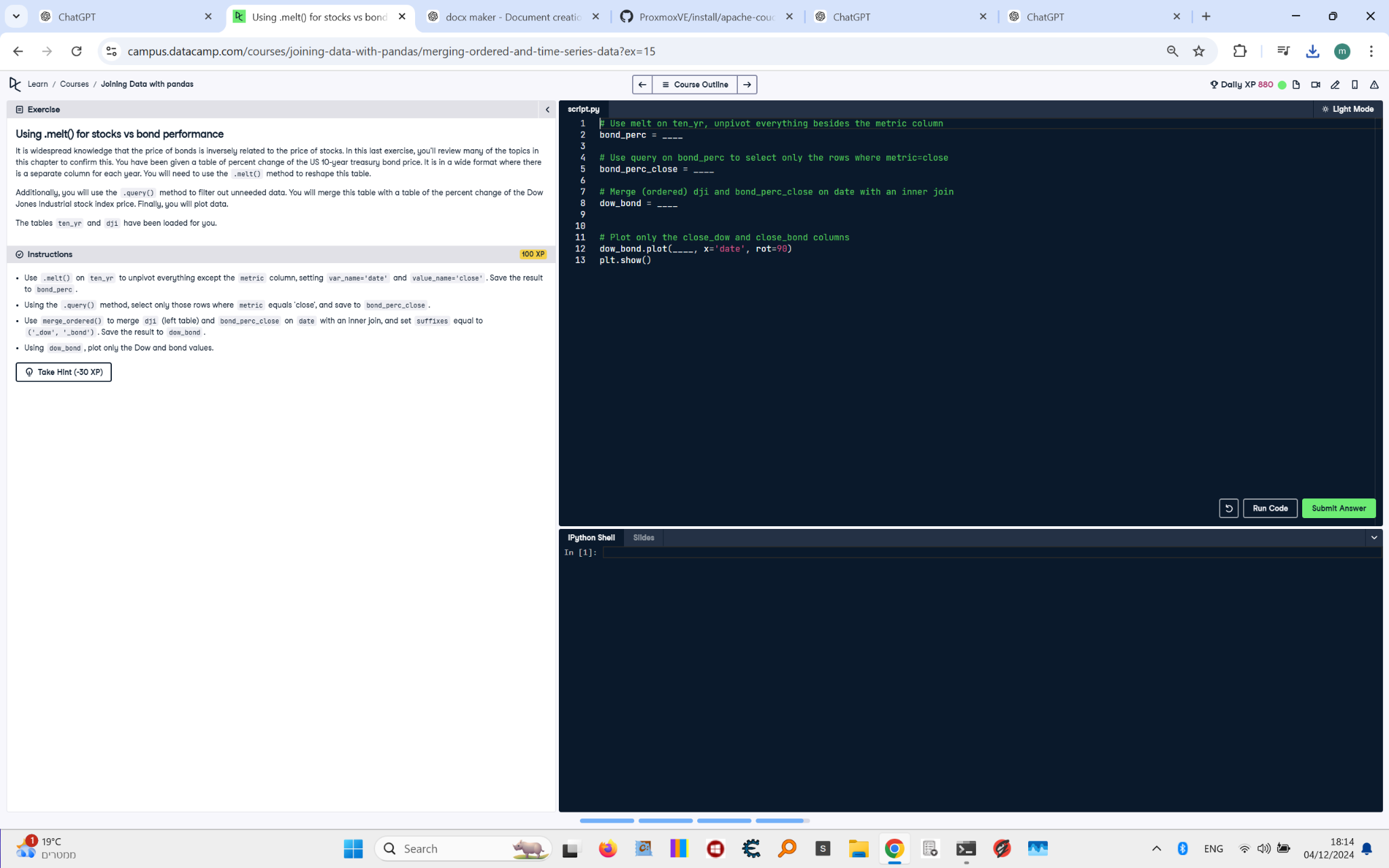
# Using .melt() for stocks vs bond performance - Corrected



## Question:

It is widely acknowledged that the price of bonds is inversely related to the price of stocks. In this exercise, you'll review many of the topics in this chapter to confirm this. You have been given a table of percent changes of the US 10-year treasury bond price. It is in a wide format where there is a separate column for each metric. You will need to use the .melt() method to reshape this table, filter rows using .query(), and merge it with a table of the percent change of the Dow Jones Industrial stock index price. Finally, you will plot the data.

## Answer:

# Use melt on ten\_yr, unpivot everything besides the metric column  
bond\_perc = ten\_yr.melt(  
 id\_vars='metric',  
 var\_name='date',  
 value\_name='close'  
)  
  
# Use query on bond\_perc to select only the rows where metric=close  
bond\_perc\_close = bond\_perc.query('metric == "close"')  
  
# Merge (ordered) dji and bond\_perc\_close on date with an inner join  
dow\_bond = pd.merge\_ordered(  
 dji, bond\_perc\_close,  
 on='date',  
 suffixes=('\_dow', '\_bond'),  
 how='inner' # Make sure to specify the join type  
)  
  
# Plot only the close\_dow and close\_bond columns  
dow\_bond.plot(  
 y=['close\_dow', 'close\_bond'],  
 x='date',  
 rot=90  
)  
plt.show()