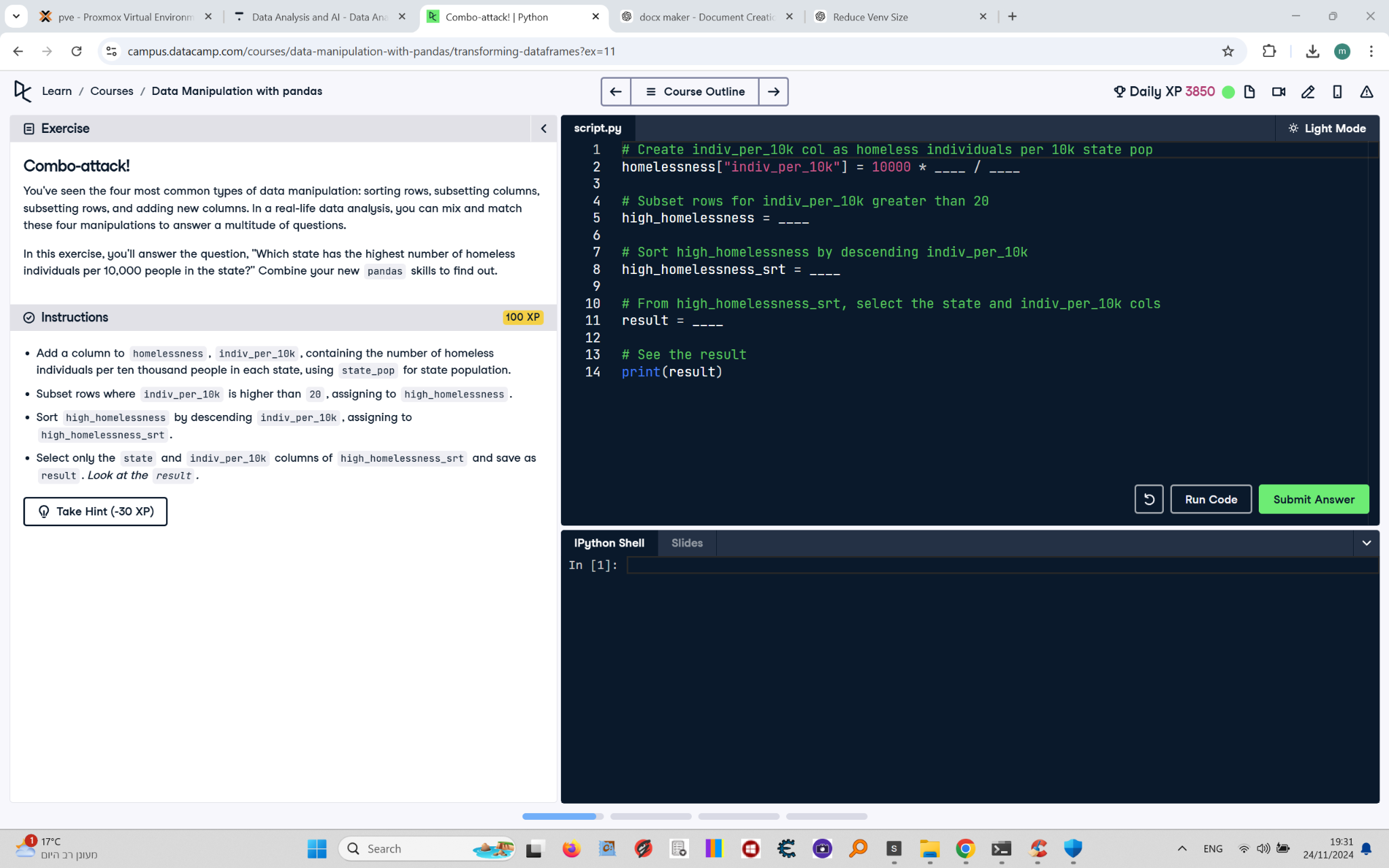
# Combo-Attack! Combining Multiple Data Manipulations

This document includes the question, the solution, and a breakdown of the code provided in the screenshot.

## Uploaded Screenshot

Below is the screenshot of the task:



## Question

1. Add a column to `homelessness`, `indiv\_per\_10k`, containing the number of homeless individuals per 10,000 people in each state, using `state\_pop` for state population.  
2. Subset rows where `indiv\_per\_10k` is higher than 20, assigning to `high\_homelessness`.  
3. Sort `high\_homelessness` by descending `indiv\_per\_10k`, assigning to `high\_homelessness\_srt`.  
4. Select only the `state` and `indiv\_per\_10k` columns of `high\_homelessness\_srt` and save as `result`. View the `result`.

## Answer

# Create indiv\_per\_10k col as homeless individuals per 10k state pop  
homelessness['indiv\_per\_10k'] = 10000 \* homelessness['individuals'] / homelessness['state\_pop']  
  
# Subset rows for indiv\_per\_10k greater than 20  
high\_homelessness = homelessness[homelessness['indiv\_per\_10k'] > 20]  
  
# Sort high\_homelessness by descending indiv\_per\_10k  
high\_homelessness\_srt = high\_homelessness.sort\_values('indiv\_per\_10k', ascending=False)  
  
# From high\_homelessness\_srt, select the state and indiv\_per\_10k cols  
result = high\_homelessness\_srt[['state', 'indiv\_per\_10k']]  
  
# See the result  
print(result)

## Code Explanation

# Explanation of the code:

1. `homelessness['indiv\_per\_10k'] = 10000 \* homelessness['individuals'] / homelessness['state\_pop']`: Adds a new column `indiv\_per\_10k` to the `homelessness` DataFrame, calculating the number of homeless individuals per 10,000 people in each state.

2. `homelessness[homelessness['indiv\_per\_10k'] > 20]`: Subsets the rows where `indiv\_per\_10k` is greater than 20 and assigns the result to `high\_homelessness`.

3. `high\_homelessness.sort\_values('indiv\_per\_10k', ascending=False)`: Sorts the `high\_homelessness` DataFrame in descending order based on the `indiv\_per\_10k` column and assigns it to `high\_homelessness\_srt`.

4. `high\_homelessness\_srt[['state', 'indiv\_per\_10k']]`: Selects the `state` and `indiv\_per\_10k` columns from the `high\_homelessness\_srt` DataFrame and assigns the result to `result`.

5. `print(result)`: Prints the resulting DataFrame to verify the calculations and filtering.