

Subsetting rows with .query() - Step 3

Subsetting rows with .query()

In this exercise, you will merge GDP and population data for Australia and Sweden from the World Bank and expand on it using the `.query()` method. You'll merge the two tables and compute the GDP per capita. Afterwards, you'll use the `.query()` method to subselect the rows and create a plot. Recall that you will need to merge on multiple columns in the proper order.

The tables `gdp` and `pop` have been loaded for you.

Instructions 3/4

• Plot `gdp_pop` on `values="gdp_per_capita"`, `index="date"`, and `columns="country"`. Save as `gdp_pivot`.

Take hint (7 XP)

```
1 # Merge gdp and pop on date and country with fill
2 gdp_pop = pd.merge_ordered(gdp, pop, on=['country', 'date'], fill_method='ffill')
3
4 # Add a column named gdp_per_capita to gdp_pop that divides the gdp by pop
5 gdp_pop['gdp_per_capita'] = gdp_pop['gdp'] / gdp_pop['pop']
6
7 # Pivot table of gdp_per_capita, where index is date and columns is country
8 gdp_pivot = gdp_pop.pivot_table('gdp_per_capita', 'date', 'country')
```

Python Shell

11	1992-01-01	Australia	167660.221	WISDOMPTF26AQ	17409000	GP_POP_TOTL
12	1993-01-01	Australia	168007.499	WISDOMPTF26AQ	17667000	GP_POP_TOTL
13	1993-06-01	Australia	168007.499	WISDOMPTF26AQ	17667000	GP_POP_TOTL
14	1993-07-01	Australia	168333.179	WISDOMPTF26AQ	17667000	GP_POP_TOTL
15	1993-09-01	Australia	169270.268	WISDOMPTF26AQ	17667000	GP_POP_TOTL
16	1990-01-01	Sweden	76837.636	WISDOMPTF26AQ	8558635	GP_POP_TOTL
17	1990-04-01	Sweden	85502.286	WISDOMPTF26AQ	8558635	GP_POP_TOTL
18	1990-07-01	Sweden	79975.548	WISDOMPTF26AQ	8558635	GP_POP_TOTL
19	1990-09-01	Sweden	80186.497	WISDOMPTF26AQ	8558635	GP_POP_TOTL
20	1991-01-01	Sweden	79201.543	WISDOMPTF26AQ	8617375	GP_POP_TOTL
21	1991-04-01	Sweden	79673.839	WISDOMPTF26AQ	8617375	GP_POP_TOTL
22	1991-07-01	Sweden	79686.778	WISDOMPTF26AQ	8617375	GP_POP_TOTL
23	1991-09-01	Sweden	79904.686	WISDOMPTF26AQ	8617375	GP_POP_TOTL
24	1992-01-01	Sweden	79390.922	WISDOMPTF26AQ	8608027	GP_POP_TOTL
25	1992-04-01	Sweden	78964.263	WISDOMPTF26AQ	8608027	GP_POP_TOTL
26	1992-07-01	Sweden	78986.485	WISDOMPTF26AQ	8608027	GP_POP_TOTL
27	1992-09-01	Sweden	78996.820	WISDOMPTF26AQ	8608027	GP_POP_TOTL
28	1993-01-01	Sweden	79783.588	WISDOMPTF26AQ	8718561	GP_POP_TOTL
29	1993-04-01	Sweden	79788.548	WISDOMPTF26AQ	8718561	GP_POP_TOTL
30	1993-07-01	Sweden	79661.818	WISDOMPTF26AQ	8718561	GP_POP_TOTL
31	1993-09-01	Sweden	77787.286	WISDOMPTF26AQ	8718561	GP_POP_TOTL

Question:

Pivot `gdp_pop` to values='gdp_per_capita', index='date', and columns='country'. Save as `gdp_pivot`.

Answer:

```
# Merge gdp and pop on date and country with fill
```

```
gdp_pop = pd.merge_ordered(
    gdp, pop,
    on=['country', 'date'],
    fill_method='ffill'
)
```

```
# Add a column named gdp_per_capita to gdp_pop that divides the gdp by pop
```

```
gdp_pop['gdp_per_capita'] = gdp_pop['gdp'] / gdp_pop['pop']
```

```
# Pivot table of gdp_per_capita, where index is date and columns is country
```

```
gdp_pivot = gdp_pop.pivot_table(
    values='gdp_per_capita',
    index='date',
    columns='country'
)
```

```
# Print the resulting pivot table  
print(gdp_pivot)
```