

Summarizing Results: Rank Countries by Medals Awarded

This task involves ranking countries based on the gold medals awarded during the 2000 Olympics. The goal is to rank all countries by their medal count and display the results in ascending order of rank.

The screenshot shows a web browser window with the URL `campus.datacamp.com/courses/intermediate-python/dictionaries-pandas?ex=17`. The page displays an exercise titled "loc and iloc ()".

Exercise Instructions:

- With `loc` and `iloc` you can do practically any data selection operation on DataFrames you can think of. `loc` is label-based, which means that you have to specify rows and columns based on their row and column labels. `iloc` is integer index based, so you have to specify rows and columns by their integer index like you did in the previous exercise.
- Try out the following commands to experiment with `loc` and `iloc` to select observations. Each pair of commands here gives the same result.

```
cars.loc["JP"]
cars.iloc[4]

cars.loc["JP"]
cars.iloc[4]

cars.loc["JP", "AUS"]
cars.iloc[4, 1]
```

As before, code is included that imports the cars data as a Pandas DataFrame.

Instructions:

- Use `loc` or `iloc` to select the observation corresponding to Japan as a Series. The label of this row is "JP", the index is 2. Make sure to print the resulting Series.
- Use `loc` or `iloc` to select the observations for Australia and Egypt as a DataFrame. You can find out about the labels/indices of these rows by inspecting `cars`. Make sure to print the resulting DataFrame.

Code Editor (script.py):

```
1 # Import cars data
2 import pandas as pd
3 cars = pd.read_csv('cars.csv', index_col = 0)
4
5 # Print out observation for Japan
6
7
8 # Print out observations for Australia and Egypt
9
```

Python Shell:

```
In [1]:
```

Correct SQL Answer

```
WITH Country_Medals AS (
  SELECT
    Country,
    COUNT(*) AS Medals
  FROM Summer_Medals
  WHERE Year = 2000
  AND Medal = 'Gold'
  GROUP BY Country
)
SELECT
  Country,
  -- Rank countries by the medals awarded
  RANK() OVER (ORDER BY Medals DESC) AS Rank
FROM Country_Medals
```

ORDER BY Rank ASC;

Explanation of the Answer

1. The `WITH` clause named `Country_Medals` calculates the total gold medals per country for the year 2000.
2. The main query uses the `RANK()` function to rank countries by their medal count in descending order.
3. The query includes a `ORDER BY Rank ASC` clause to display results in ascending order of rank.