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# Assignment Description

The assignment data was extracted from the Wikipedia entry on All Time Olympic Games Medals ([https://en.wikipedia.org/wiki/All-time\\_Olympic\\_Games\\_medal\\_table](https://en.wikipedia.org/wiki/All-time_Olympic_Games_medal_table)), with some minor modification to make things interesting. The dataset is split into two CSV files one of summer games and the other for the winter games and combined total.

Here you can find the datasets: <https://github.com/mysilver/COMP9321-Data-Services/tree/master/assignments> (<https://github.com/mysilver/COMP9321-Data-Services/tree/master/assignments>)

Use the datasets to answer the following questions. Create a python function for each of questions, then in the main method, print the question names and then the outputs of functions.

## Example Question:

Read the file Olympics\_dataset1.csv dataset as a dataframe and display the first 5 rows.

## Sample Answer:

### Code:

```
import pandas as pd
def obtain_data():
    df = pd.read_csv('Olympics_dataset1.csv', index_col=0, skiprows=1)
    df.head(5)
```

## Output

	Rubish	Number of Games the country participated in	Gold	Silver	Bronze	Total
Afghanistan (AFG)	BLA	14.0	0	0	2	2
Algeria (ALG)	BLA	13.0	5	4	8	17
Argentina (ARG)	BLA	24.0	21	25	28	74
Armenia (ARM)	BLA	6.0	2	6	6	14
Australasia (ANZ) [ANZ]	BLA	2.0	3	4	5	12

Specification	Make Submission	Check Submission	Collect Submission
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- **Question 1:**  
Merge the two datasets Olympics\_dataset1.csv and Olympics\_dataset2.csv and display the first five rows (do not concatenate the datasets).
- **Question 2:**  
Set the index as the country name and then display the first country in the Dataframe.
- **Question 3:**  
Remove the rubbish column and display the first five rows.
- **Question 4:**  
Remove the rows with NaN fields and display the last ten rows.
- **Question 5:**  
Calculate and display which country has won the most gold medals in summer games?

- **Question 6:**

Calculate and display which country had the biggest difference between their summer and winter gold medal?

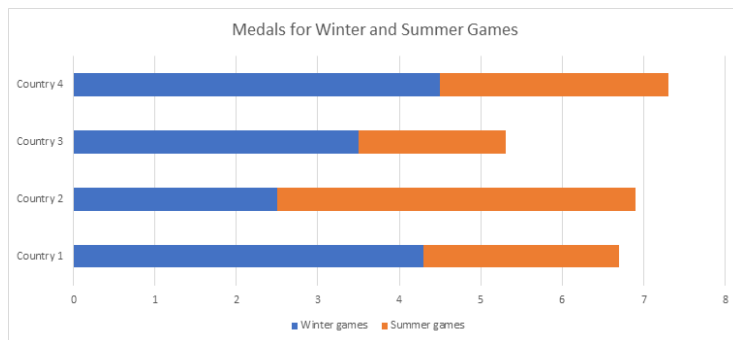
- **Question 7:**

Sort the countries in descending order, according to the number of total of medals earned throughout the history and display the first and last 5 rows.

- **Question 8:**

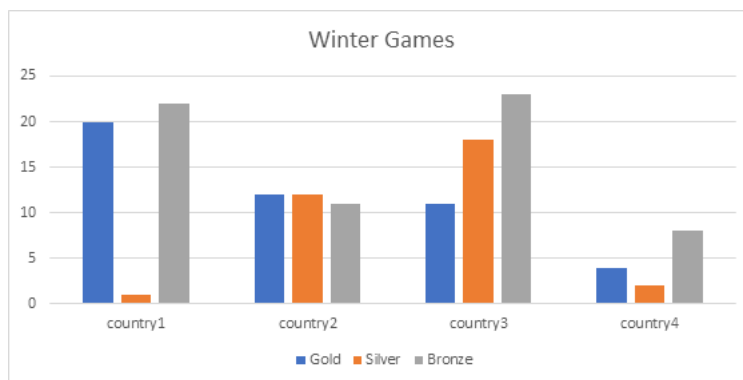
Plot a bar chart of the top 10 countries (according to the sorting in Question 7). For each country use a stacked bar chart showing for each county the total medals for winter and summer games.

See example chart below:



- **Question 9:**

Plot a bar chart of the countries (United States, Australia, Great Britain, Japan, New Zealand). For each county you need to show the gold, silver and bronze medals for winter games. See example below of the chart:



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## Comments

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Luke Yuan (/users/z5042615) 20 days ago (Thu Sep 06 2018 10:48:14 GMT+1000 (Australian Eastern Standard Time))

when r we able to get feedback from ass1?

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