Monmouth COLLEGE

- Name: _____
- Date: _____
- Section: 09:00 ~ 09:50

BUSI 201 Business Data Analysis

Final Exam

Spring 2025

INSTRUCTIONS:

- Once you have completed the exam, save or rename the workbook as `LoginID-final.xlsx`, and submit it as an email attachment to `BPARK@monmouthcollege.edu`.
- Submissions via SharePoint file sharing will not be accepted and will result in automatic forfeiture.
- `BUSI201-S2025-Final-S02-Workbook.xlsx` is the companion workbook for this exam.
- The workbook contains 7 worksheets: `Sheet01` through `Sheet07`.
- The quiz booklet includes 7 problems with a total of 11 tasks.
- Before submitting, double-check your email for the attached file, the correct file name, and the receiver's email address. You will not be allowed to submit or update your solutions after the in-class deadline.

Problem #1. Functions

Navigate to the worksheet `Sheet01` and complete the tasks described below. Any material that is determined to be manually calculated and entered will not receive credit. All results must function correctly, regardless of how the data is sorted or filtered.

Continent	Average Meat Consumption	Average Meat Consumption in 2020
Africa	A	B
Asia		
Europe		
North America		
South America		
Oceania		

- **Task #1:** Fill the cells in the Red Box: A with the average meat consumption for each `Continent` across all observed years. For example, cell `K3` should display the average meat consumption of all countries in `Africa` over all available years.

- **Task #2:** Fill the cells in the Blue Box: B with the average meat consumption for each `Continent` in the year 2020. For example, cell `L3` should display the average meat consumption of all countries in `Africa` in 2020.

Problem #2. Functions

Navigate to the worksheet `Sheet02` and complete the tasks described below. Any material that is determined to be manually calculated and entered will not receive credit. All results must function correctly, regardless of how the data is sorted or filtered.

CODE	Meat Consumption	GDP per Capita
USA2017	A	B
UKR2022		
VNM2000		
BRA2018		
AFG2001		

Q #1	What is the 7th highest meat consumption observed in the data?
A #1	
Q #2	What is the last year observed in this data?
A #2	
Q #3	How many countries in Africa appear in this data?
A #3	

- **Task #1:** Fill the cells in the Red Box: A with the observed meat consumption level for each `CODE`. For example, cell `K3` should display the meat consumption level for `USA2017`.

- **Task #2:** Fill the cells in the Blue Box: B with the observed GDP per capita for each `CODE`. For example, cell `L3` should display the GDP per capita for `USA2017`.

- **Task #3:** Use functions to answer the three questions in the Green Box .

Problem #3. Sorting / Filtering

Navigate to the worksheet `Sheet03`. Apply filters and sort the data so that only countries in `North America` and `South America` between the years 2020 and 2022 are visible to the reader.

ENTITY	CODE	CONTINENT	YEAR	MEAT CONSUMPTION	GDP PER CAPITA	ABBR
Antigua and Barbuda	ATG2020	North America	2020	81.90427	23915.162	ATG
Antigua and Barbuda	ATG2021	North America	2021	89.558495	25733.295	ATG
Antigua and Barbuda	ATG2022	North America	2022	93.867096	28033.13	ATG
Argentina	ARG2020	South America	2020	114.39404	23877.094	ARG
Argentina	ARG2021	South America	2021	111.49272	26300.273	ARG
Argentina	ARG2022	South America	2022	113.51555	27627.963	ARG
Bahamas	BHS2020	North America	2020	109.312225	25457.08	BHS

Problem #4. Conditional Formatting

Navigate to the worksheet `Sheet04` and complete the tasks described below.

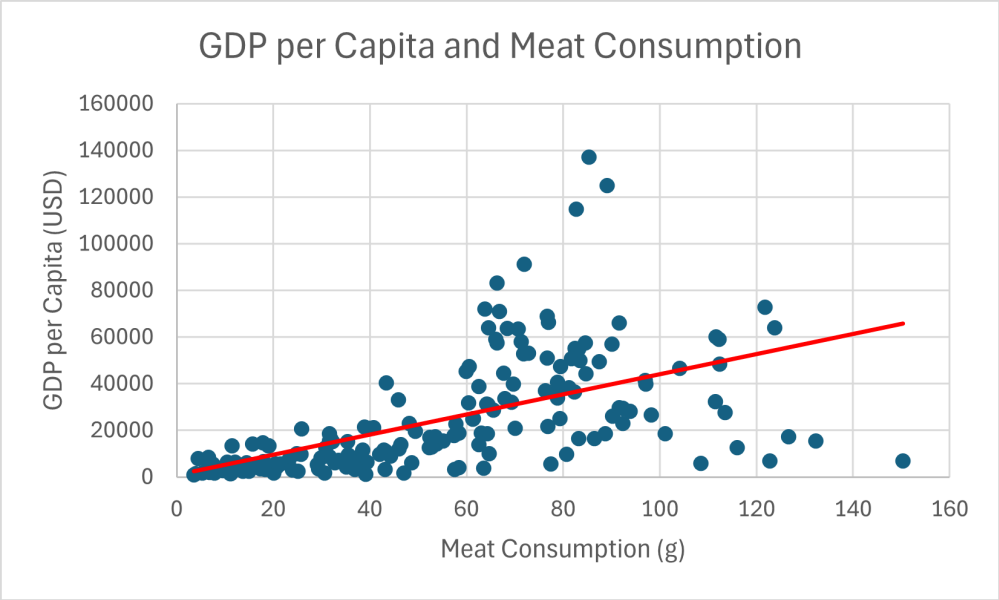
ENTITY	CODE	CONTINENT	YEAR	MEAT CONSUMPTION	MEAT_VISUAL	GDP PER CAPITA	ABBR
Afghanistan	AFG2000	Asia	2000	15.868059		1617.8264	AFG
Afghanistan	AFG2001	Asia	2001	13.671222		1454.1108	AFG
Afghanistan	AFG2002	Asia	2002	14.23903		1774.3087	AFG
Afghanistan	AFG2003	Asia	2003	13.1173315		1815.9282	AFG
Afghanistan	AFG2004	Asia	2004	13.956356		1776.9182	AFG
Afghanistan	AFG2005	Asia	2005	14.272054		1908.1147	AFG
Afghanistan	AFG2006	Asia	2006	11.301249		1929.7239	AFG

- **Task #1:** Apply conditional formatting to column `G` so that each `ENTITY`'s meat consumption level is indicated with one of three colored flags based on the following criteria:
  - If meat consumption is greater than or equal to 70, display a green flag.
  - If meat consumption is less than 70 but greater than or equal to 20, display a yellow flag.
  - If meat consumption is less than 20, display a red flag.

- **Task #2:** Apply conditional formatting to column `H` so that cells containing `GDP PER CAPITA` values in the bottom 30% are shaded green.

Problem #5. Charts

Navigate to the worksheet `Sheet05`. Using the data provided, replicate the chart shown below as closely as possible. The colors do not need to match exactly.



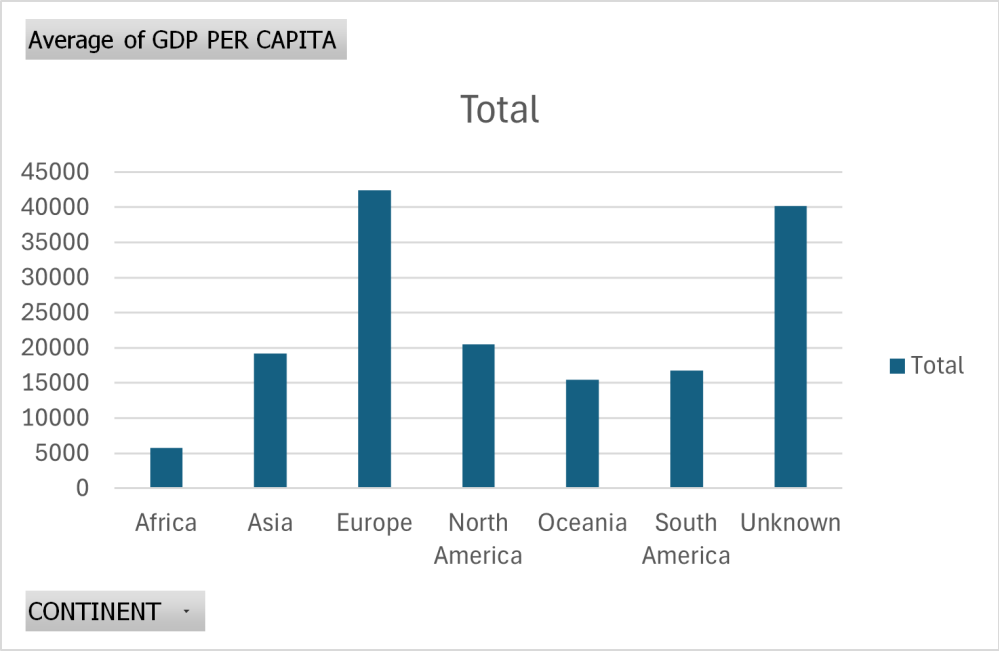
Problem #6. PivotTables

Navigate to the worksheet `Sheet06`. Using the data provided, replicate the PivotTable shown below as closely as possible.

Average of MEAT CONSUMPTION	Column Labels							
Row Labels	Africa	Asia	Europe	North America	Oceania	South America	Unknown	Grand Total
2000-2004	17.44590385	32.6155136	69.5460421	58.30879531	57.5381847	53.94861131	62.7286146	44.4956342
2005-2009	19.06526924	36.993533	72.8251889	62.71465716	60.9637892	56.90858538	68.8988918	48.0994201
2010-2014	22.22038954	37.1539765	72.3872155	64.9987863	61.2662945	62.18688242	63.6646052	48.2348884
2015-2019	22.91767605	40.0266626	72.8258988	68.10952662	68.7056729	68.00739258	68.3043188	50.328262
2020-2024	23.69778138	43.7304152	73.2428256	72.36201944	81.7473441	71.60912909	66.1753883	53.2681582
Grand Total	**21.03271446**	**37.685058**	**72.0979046**	**64.68456023**	**66.1272361**	**61.74281503**	**65.9496868**	**48.592987**

Problem #7. PivotCharts

Navigate to the worksheet `Sheet07`. Using the data provided, replicate the PivotChart shown below as closely as possible.



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