Monmouth COLLEGE

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-S01-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 12 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.
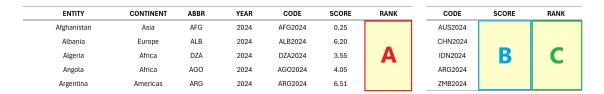
Problem #1. Functions

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. The image shown has been cropped to fit the booklet.

ENTITY	CONTINENT	ABBR	YEAR	CODE	SCORE	PASS/FAIL	Entity	Average Score	Score in 2024
Afghanistan	Asia	AFG	2006	AFG2006	3.06		USA		
Afghanistan	Asia	AFG	2008	AFG2008	3.02		GBR		
Afghanistan	Asia	AFG	2010	AFG2010	2.48	A	JPN	B	C
Afghanistan	Asia	AFG	2011	AFG2011	2.48		RUS		
Afghanistan	Asia	AFG	2012	AFG2012	2.48		World		

- **Task #1:** Fill the cells in the Red Box: A with "P" if the observed democracy SCORE is greater than 5, and "F" if the observed democracy SCORE is less than or equal to 5.

- **Task #2:** Fill the cells in the Blue Box: B with the average democracy SCORE for each `Entity`. For example, cell K3 should display the average democracy SCORE of the USA across all observed years.

- **Task #3:** Fill the cells in the Green Box: C with the democracy SCORE for each `Entity` in 2024. For instance, cell L3 should display the democracy SCORE of the USA in 2024.

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. The image shown has been cropped to fit the booklet.

ENTITY	CONTINENT	ABBR	YEAR	CODE	SCORE	RANK	CODE	SCORE	RANK
Afghanistan	Asia	AFG	2024	AFG2024	0.25		AUS2024		
Albania	Europe	ALB	2024	ALB2024	6.20		CHN2024		
Algeria	Africa	DZA	2024	DZA2024	3.55	A	IDN2024	B	C
Angola	Africa	AGO	2024	AGO2024	4.05		ARG2024		
Argentina	Americas	ARG	2024	ARG2024	6.51		ZMB2024		

- **Task #1:** Fill the cells in the Red Box: A with the rankings of each country's democracy SCORE. The country with the highest SCORE should be ranked 1.

- **Task #2:** Fill the cells in the Blue Box: B with the observed democracy SCORE for each CODE. For example, cell K3 should display the democracy SCORE for AUS2024.

- **Task #3:** Fill the cells in the Green Box: C with the RANK for each CODE. For instance, cell L3 should display the RANK for AUS2024.

Problem #3. Sorting / Filtering

Navigate to the worksheet Sheet03. Apply filters to the data so that only countries with a SCORE less than 2 are visible to the reader.

ENTITY	CONTINENT	ABBR	YEAR	CODE	SCORE
Afghanistan	Asia	AFG	2024	AFG2024	0.25
Belarus	Europe	BLR	2024	BLR2024	1.99
Central African Republic	Africa	CAF	2024	CAF2024	1.18
Chad	Africa	TCD	2024	TCD2024	1.89
Democratic Republic of Congo	Africa	COD	2024	COD2024	1.92
Equatorial Guinea	Africa	GNQ	2024	GNQ2024	1.92
Eritrea	Africa	ERI	2024	ERI2024	1.97
Iran	Asia	IRN	2024	IRN2024	1.96

Problem #4. Sorting / Filtering

Navigate to the worksheet Sheet04. Apply filters and sort the data so that only countries in the Americas are visible, and the countries are sorted by SCORE, with higher values appearing at the top.

ENTITY	CONTINENT	ABBR	YEAR	CODE	SCORE
Canada	Americas	CAN	2024	CAN2024	8.69
Uruguay	Americas	URY	2024	URY2024	8.67
Costa Rica	Americas	CRI	2024	CRI2024	8.29
United States	Americas	USA	2024	USA2024	7.85
Chile	Americas	CHL	2024	CHL2024	7.83
Trinidad and Tobago	Americas	TTO	2024	TTO2024	7.09
Panama	Americas	PAN	2024	PAN2024	6.84
Suriname	Americas	SUR	2024	SUR2024	6.79

Problem #5. Conditional Formatting

Navigate to the worksheet Sheet05 and complete the tasks described below.

ENTITY	CONTINENT	ABBR	YEAR	CODE	SCORE	VISUAL
Afghanistan	Asia	AFG	2024	AFG2024	0.25	
Albania	Europe	ALB	2024	ALB2024	6.20	
Algeria	Africa	DZA	2024	DZA2024	3.55	
Angola	Africa	AGO	2024	AGO2024	4.05	
Argentina	Americas	ARG	2024	ARG2024	6.51	
Armenia	Europe	ARM	2024	ARM2024	5.35	
Australia	Oceania	AUS	2024	AUS2024	8.85	
Austria	Europe	AUT	2024	AUT2024	8.28	

- **Task #1:** Apply conditional formatting so that rows containing entities with a democracy SCORE greater than 8 are shaded green. The exact shade of green does not matter.

- **Task #2:** Apply conditional formatting to column H so that each ENTITY's democracy SCORE is visualized as shown in the image above.

Problem #6. Charts

Navigate to the worksheet Sheet06. Using the data provided, replicate the chart shown below as closely as possible. The colors do not need to match exactly.

Problem #7. PivotTables

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

Average of SCORE	YEAR																	
CONTINENT	2006	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
Africa	4.11	4.14	4.07	4.26	4.31	4.32	4.30	4.32	4.30	4.28	4.29	4.22	4.12	4.07	4.08	3.97	3.92	4.18
Americas	6.55	6.60	6.54	6.53	6.53	6.55	6.53	6.54	6.50	6.44	6.42	6.32	6.28	6.02	5.99	5.88	5.81	6.35
Asia	4.38	4.46	4.44	4.41	4.44	4.48	4.52	4.50	4.49	4.41	4.41	4.37	4.32	4.21	4.20	4.14	4.04	4.37
Europe	7.66	7.63	7.46	7.39	7.40	7.39	7.41	7.42	7.35	7.31	7.33	7.36	7.28	7.27	7.35	7.35	7.36	7.40
Oceania	7.58	7.48	7.16	7.12	7.12	7.09	7.48	7.50	7.49	7.56	7.56	7.56	7.51	7.50	7.46	7.46	7.46	7.42
Grand Total	5.52	5.55	5.46	5.49	5.52	5.53	5.55	5.55	5.52	5.48	5.48	5.44	5.37	5.28	5.29	5.23	5.17	5.44

- Original Score: _____

- Recovered Score: _____

- Original Date: _____

- Recovered Date: _____