THE WEALTH OF NATION'S

GDP Report

19 APRIL 2024

AMRIN SHAIKH

CONTENTS

Data Visualisation

Scenario

Data visualisation has become an essential business capability to help transform information into insights that can drive meaningful business outcomes and improved experiences. Today, most organizations have accumulated a wealth of data from the different corners of their businesses they are then unable to see how this data can help them make better decisions, making actions, and results.

First Task

Policies and Procedure

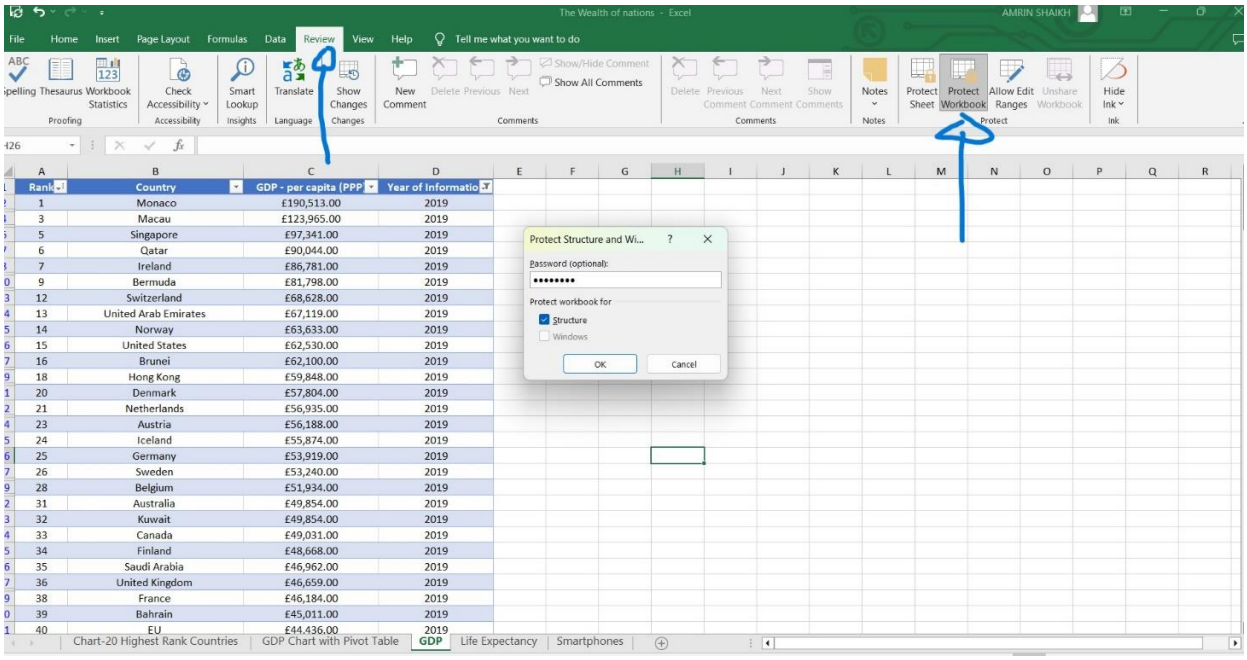
1. **Data Privacy and Confidentiality:** Our foremost policy focuses on safeguarding sensitive information pertaining to individuals, organisations or nations. This ensures privacy protection, preventing unauthorized access or misuse, thus upholding ethical responsibilities and fostering trust with stakeholders.
2. **Data Security**: We prioritize implementing robust measures to fortify against data breaches, unauthorised access, or cyber threats. By protecting our data assets, we maintain integrity, mitigate risks, and safeguard against potential misuse or manipulation.
3. **Data Quality and Accuracy**: Upholding a commitment to maintaining high- quality data involves rigorous validation, cleansing and documentation processes. This dedication ensures that informed decisions are made based on accurate insights, avoiding errors and enhancing efficiency in our analyses.
4. **Data Usage and Licensing**: It's imperative to understand and adhere to data usage rights, licensing agreements, and restrictions. This compliance not only respects legal obligations but also acknowledges the ownership rights of data creators, fostering ethical conduct and averting potential legal disputes.
5. **Transparency and Documentation:** We prioritize transparency by meticulously documenting data sources, transformations, and underlying assumptions. This facilitates reproducibility, accountability, collaboration among analysts, and enables seamless auditing and traceability processes.
6. **Bias and Fairness:** Addressing bias throughout the data lifecycle—from collection to analysis – is paramount. By ensuring equity and avoiding discrimination, we uphold ethical standards contribute to a fairer society, and provide insights that are both reliable and socially responsible.

Second task

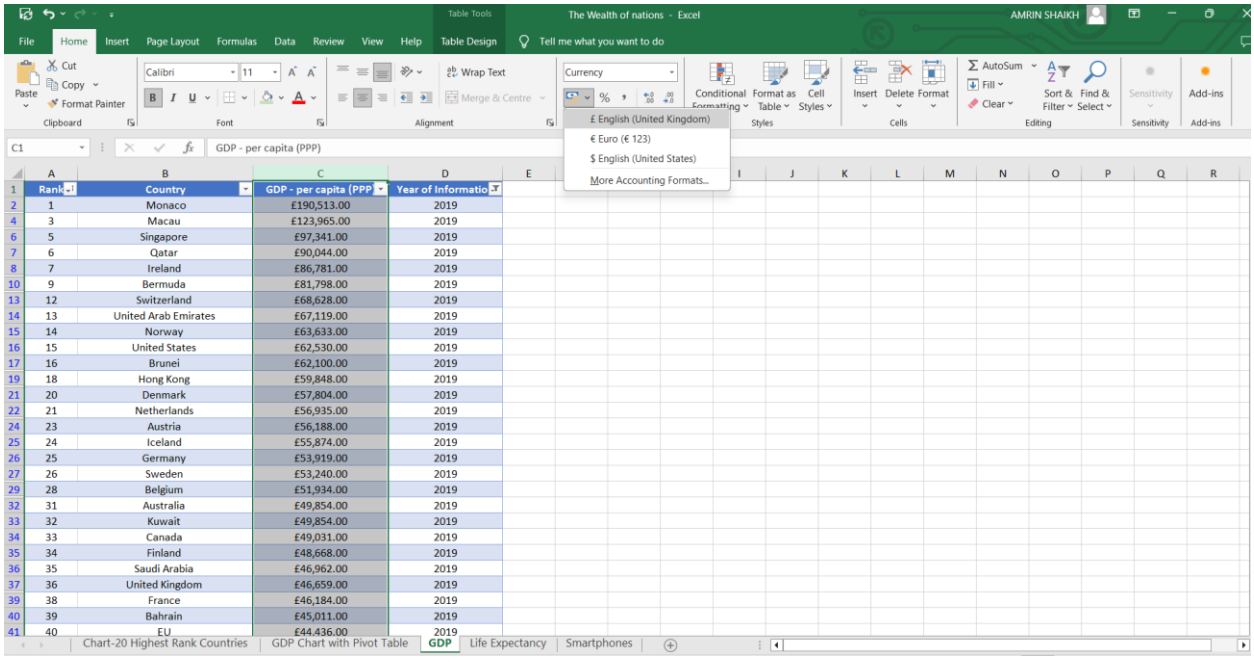
Excel

I have worked on provided dataset of 'The Wealth of nations' data. Here, I have used various excel command to prepare data visualisation to get insights for comparing GDP per capita data for different countries, which are stated below,

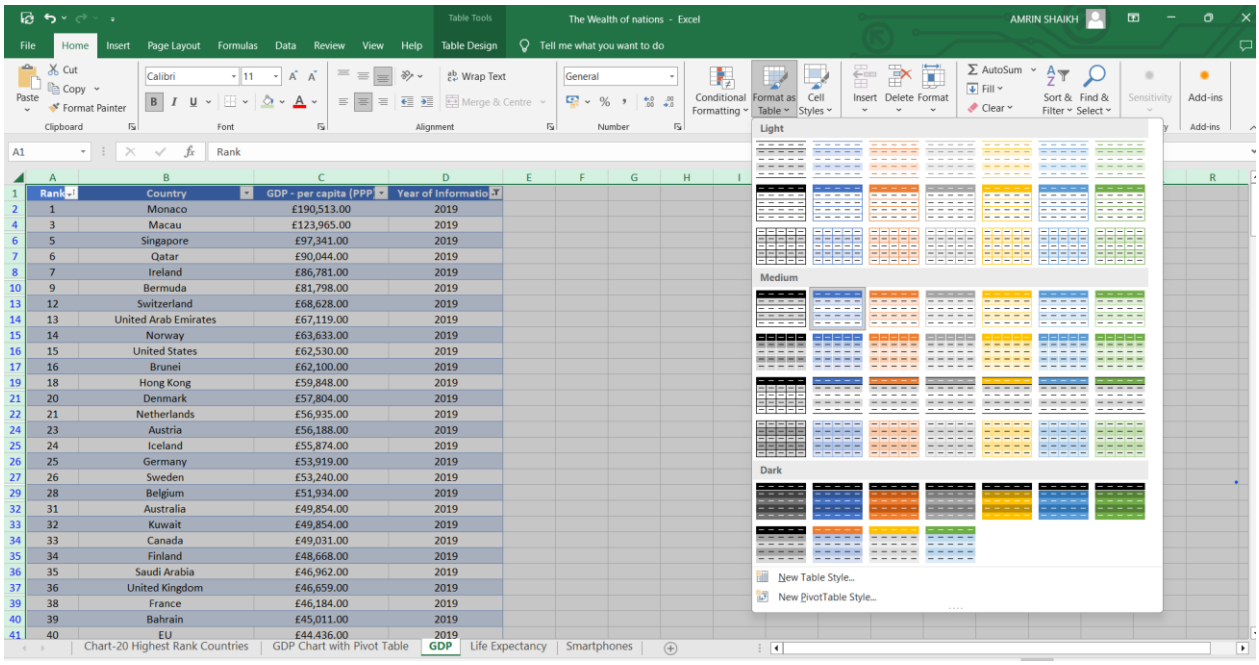
1.Set password to protect the workbook.



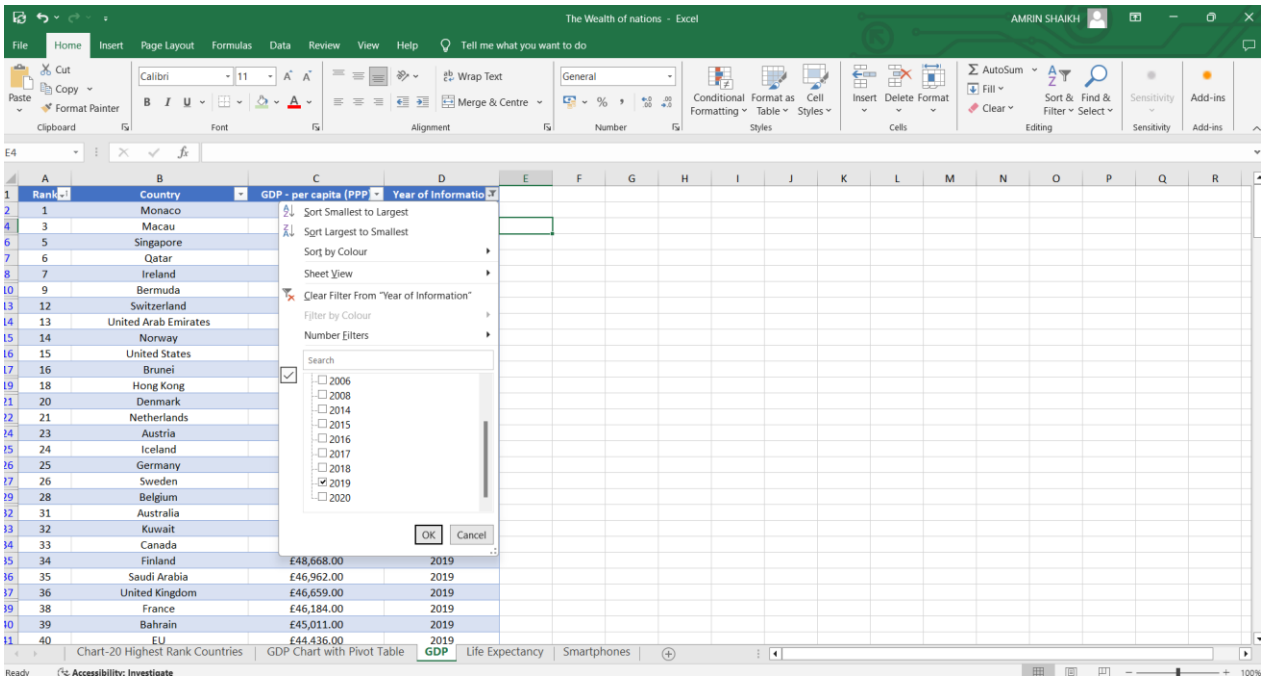
2. Highlight column C and change the data to display in British Pound symbol.



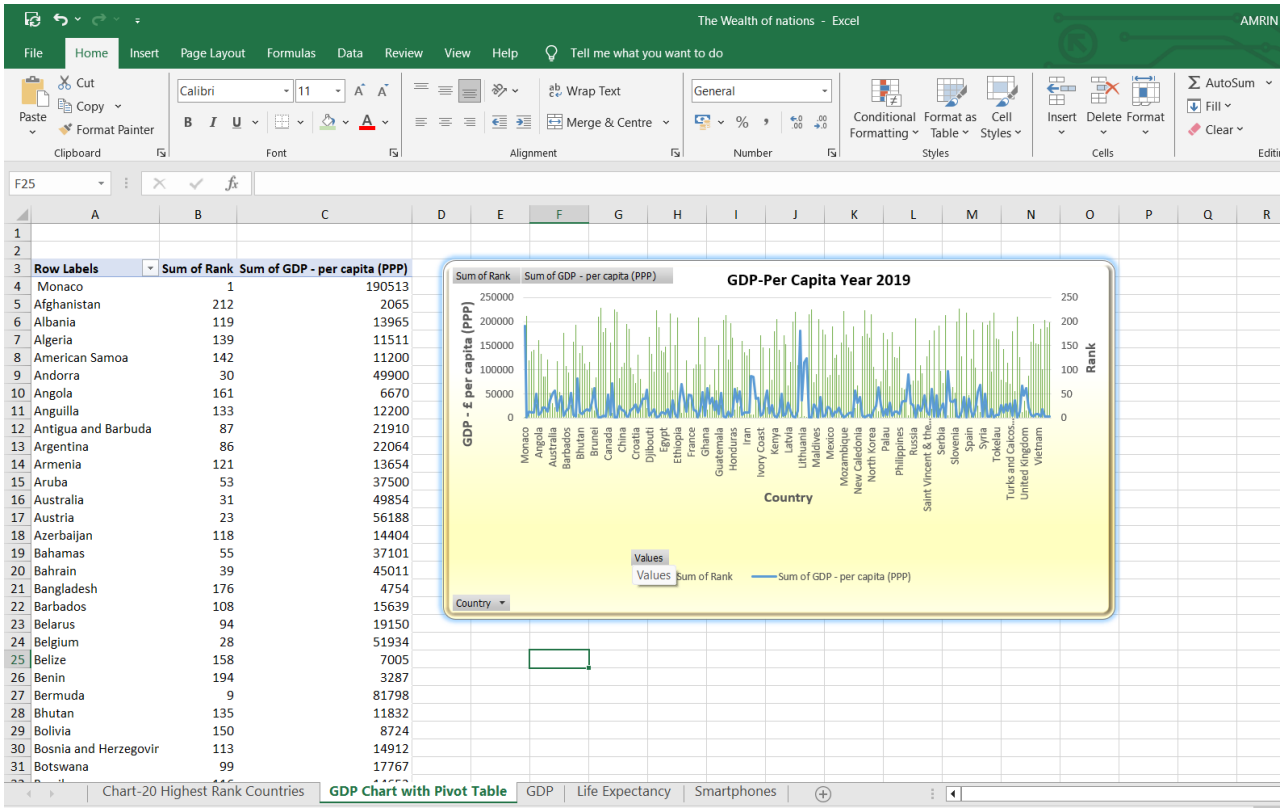
3.Turn the GDP sheet into a table.



4. Filter the table to display only the information for 2019.



5. Next create a chart that will only display the following data ‘Rank, Country and GDP - per capita (PPP). The chart can be anything as long as it is suitable.



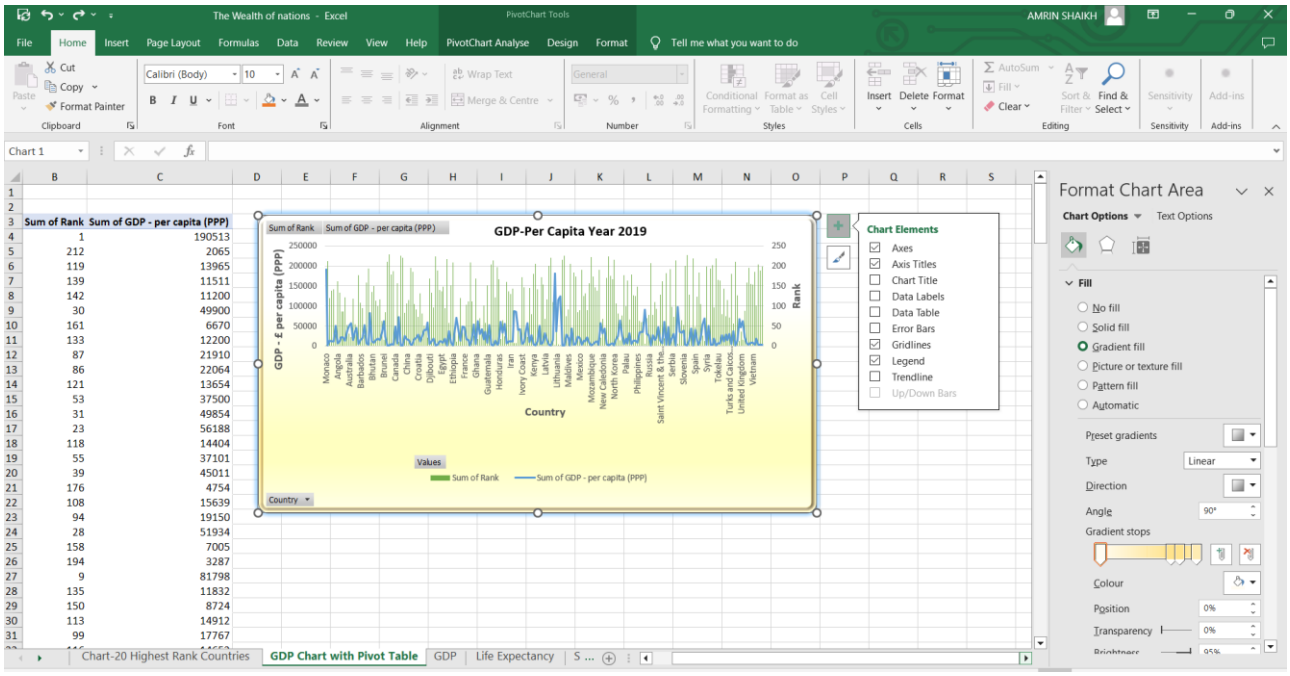
Row Labels	Sum of Rank	Sum of GDP - per capita (PPP)
Monaco	1	190513
Afghanistan	212	2065
Albania	119	13965
Algeria	139	11511
American Samoa	142	11200
Andorra	30	49900
Angola	161	6670
Anguilla	133	12200
Antigua and Barbuda	87	21910
Argentina	86	22064
Armenia	121	13654
Aruba	53	37500
Australia	31	49854
Austria	23	56188
Azerbaijan	118	14404
Bahamas	55	37101
Bahrain	39	45011
Bangladesh	176	4754
Barbados	108	15639
Belarus	94	19150
Belgium	28	51934
Belize	158	7005
Benin	194	3287
Bermuda	9	81798
Bhutan	135	11832
Bolivia	150	8724
Bosnia and Herzegovir	113	14912
Botswana	99	17767

6. Using your creative skills edit the chart

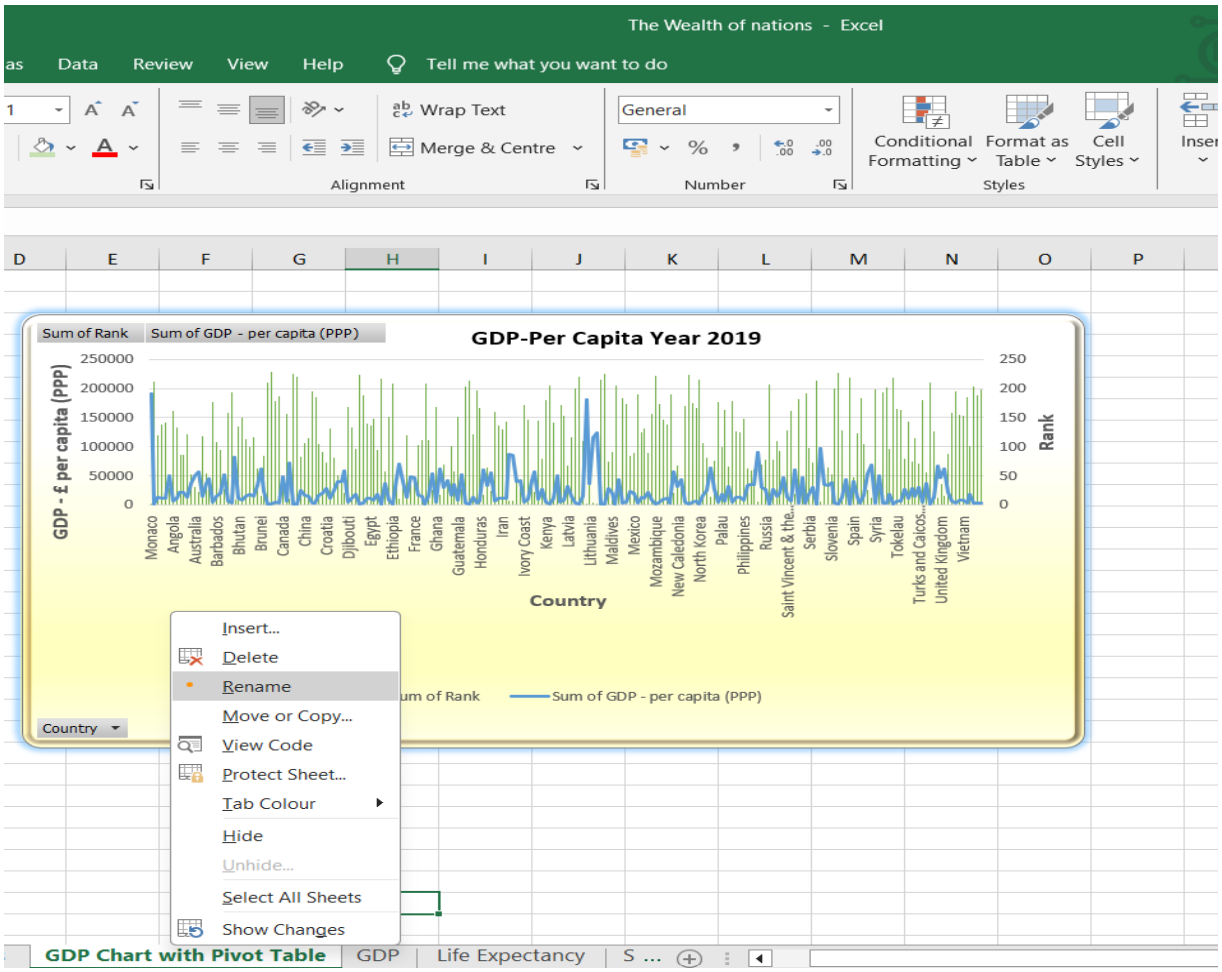
a. Add a title.

b. Add X and Y axis labels.

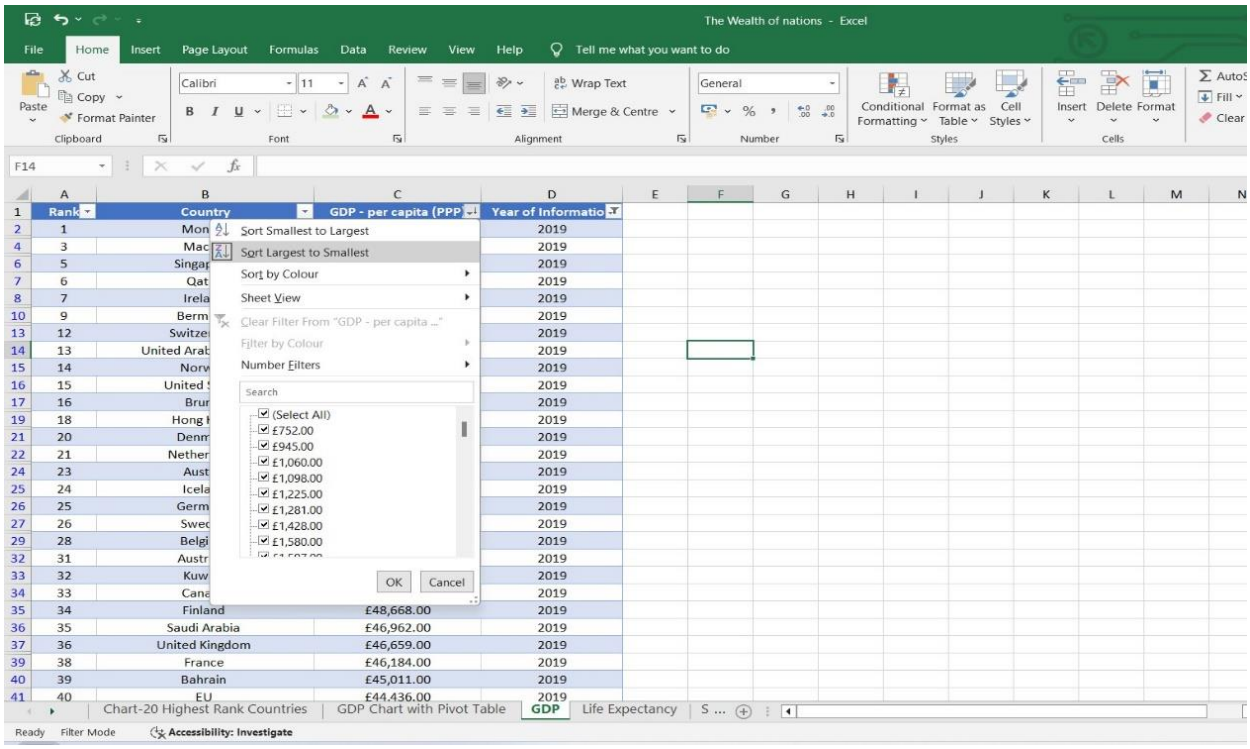
c. Make the chart visually pleasing.



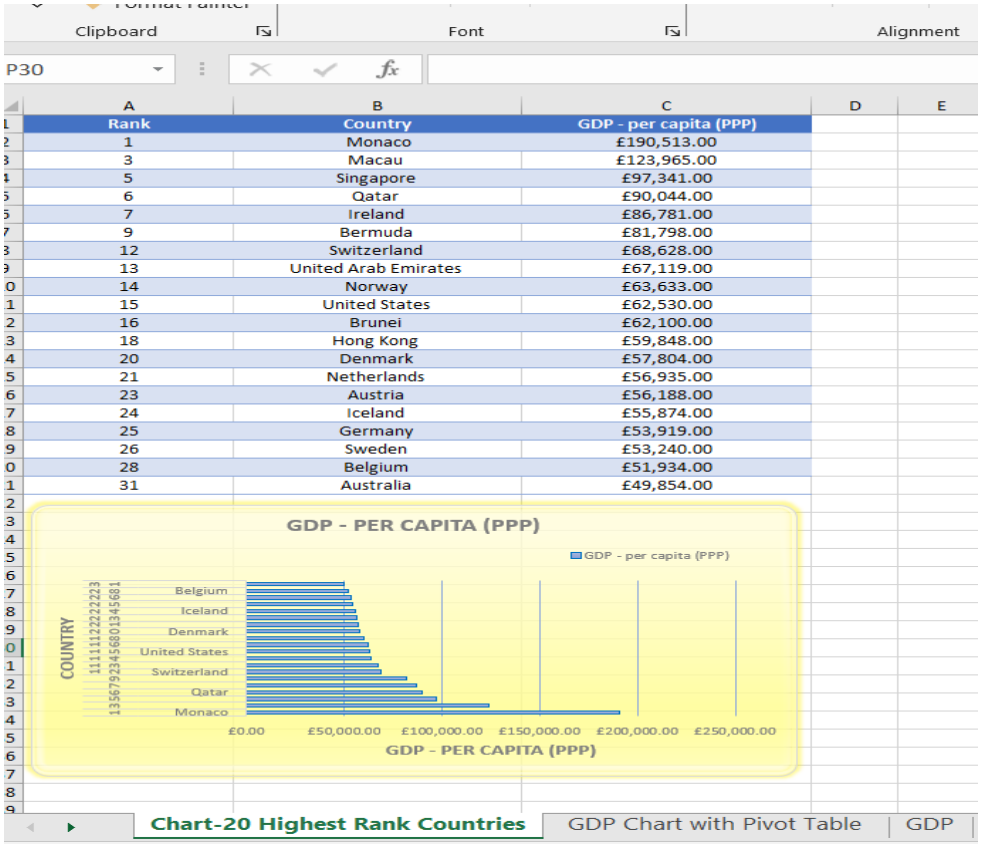
7. Move the chart to a new sheet tab and label with a suitable name.



8. Create a sort for the top 20 highest ranking counties.

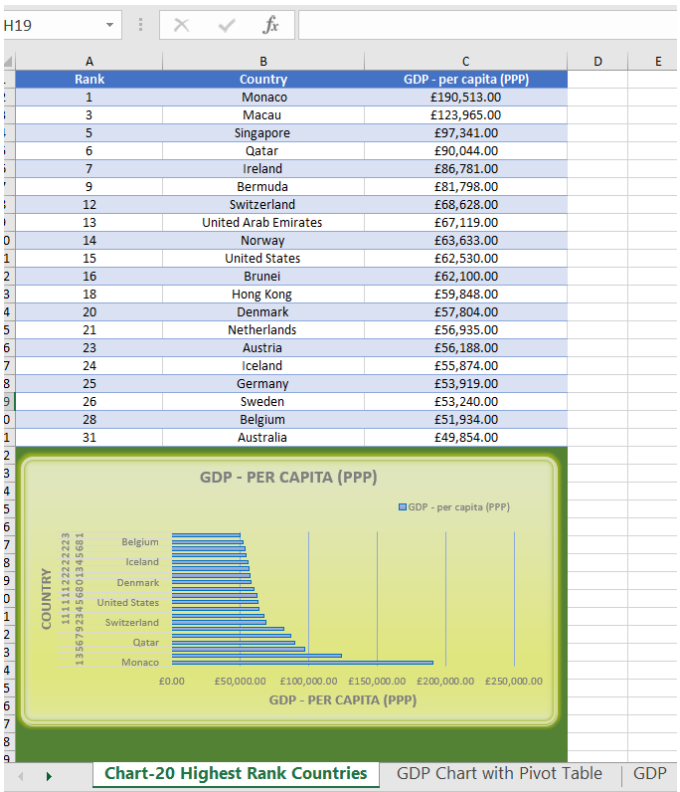


9. Next create a new Bar chart to display the 20 highest ranking countries from your sort and then move the chart to be underneath the table, as shown below.



Rank	Country	GDP - per capita (PPP)
1	Monaco	£190,513.00
3	Macau	£123,965.00
5	Singapore	£97,341.00
6	Qatar	£90,044.00
7	Ireland	£86,781.00
9	Bermuda	£81,798.00
12	Switzerland	£68,628.00
13	United Arab Emirates	£67,119.00
14	Norway	£63,633.00
15	United States	£62,530.00
16	Brunei	£62,100.00
18	Hong Kong	£59,848.00
20	Denmark	£57,804.00
21	Netherlands	£56,935.00
23	Austria	£56,188.00
24	Iceland	£55,874.00
25	Germany	£53,919.00
26	Sweden	£53,240.00
28	Belgium	£51,934.00
31	Australia	£49,854.00

10. Colour the background by highlighting the area underneath the table as shown below. Find the add a fill colour icon and select a colour.



Rank	Country	GDP - per capita (PPP)
1	Monaco	£190,513.00
3	Macau	£123,965.00
5	Singapore	£97,341.00
6	Qatar	£90,044.00
7	Ireland	£86,781.00
9	Bermuda	£81,798.00
12	Switzerland	£68,628.00
13	United Arab Emirates	£67,119.00
14	Norway	£63,633.00
15	United States	£62,530.00
16	Brunei	£62,100.00
18	Hong Kong	£59,848.00
20	Denmark	£57,804.00
21	Netherlands	£56,935.00
23	Austria	£56,188.00
24	Iceland	£55,874.00
25	Germany	£53,919.00
26	Sweden	£53,240.00
28	Belgium	£51,934.00
31	Australia	£49,854.00

Reflective Statement:

Throughout the process of preparing this data visualisation report, I have gained valuable insights and skills, particularly in utilizing Excel commands to create compelling visual representations of data. Initially, I approached this task with basic understanding of excels functionalities, through exploration and experimentation. I discovered various commands and techniques that significantly enhanced the clarity and effectiveness of my visualisations.

One of the most notable learning was the versatility of excels charting tools. By mastering commands such as Pivot Tables, VLOOKUP, and conditional formatting, I was able to manipulate and organise data in ways that structured trends, patterns, and relationships.

Moreover, searching into the complexity of excels formatting options allowed me to refine beauty of my visualisations, ensuring they were not only informative but also visually appealing. From adjusting colours and fonts to customizing axis labels and legends, each modification served to enhance the overall clarity and readability of the charts.

However, this learning journey was not without its challenges. Navigating the vast array of Excel commands and functionalities required patience, persistence and willingness to experiment. There were moments of frustration and setbacks, but each obstacle served as an opportunity for growth and learning.

Looking ahead, I am eager to continue improving my skills in data visualisation, exploring advanced techniques, and integrating additional tools and platforms into my collection. This experience has underscored the importance of continuous learning and adaptation in the ever-evolving field of data analysis.

In conclusion, the process of preparing this data visualisation report has been both educational and rewarding, deepening my understanding of Excels capabilities and equipping me with valuable skills that will undoubtedly benefit my future efforts in data analysis and visualisation.