

## **ASSIGNMENT 07**

### **SEPTEMBER 10**

- To make the connections we need one more categorical data, country can be grouped by continents.
- We can import the table consisting country and continent using web scrapping.
- In Home tab select import excel file, select the excel file consisting the continent.
- Select the table and transform data before importing.
- The data will be opened in power query use the first column as headers.
- Change the table name as Continent
- Now import to power BI
- Now we need to establish the relationships between the tables.
- Navigate to the model view, drag and drop country from WHR to country in Continent table.
- Now the connection is established.

## SCATTER PLOT WITH PLAY AXIS:

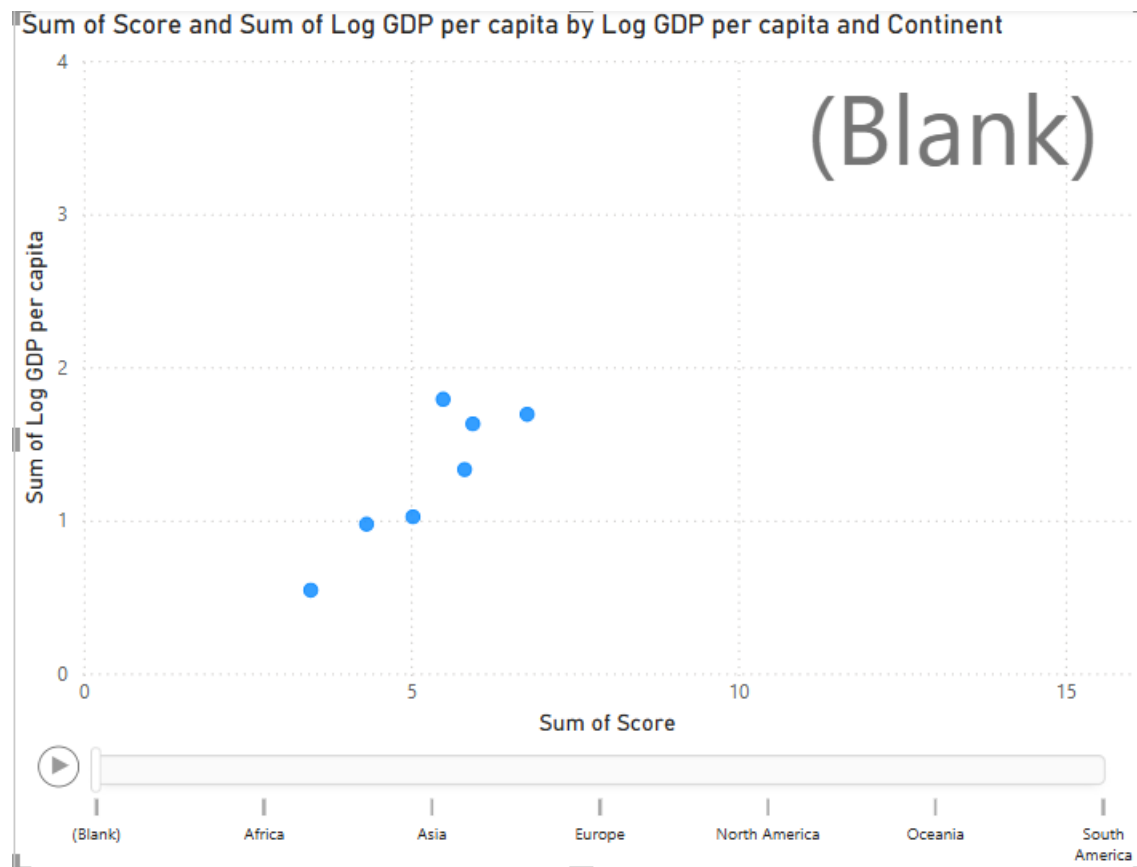


CHART TYPE: Scatter plot

INSIGHTS:

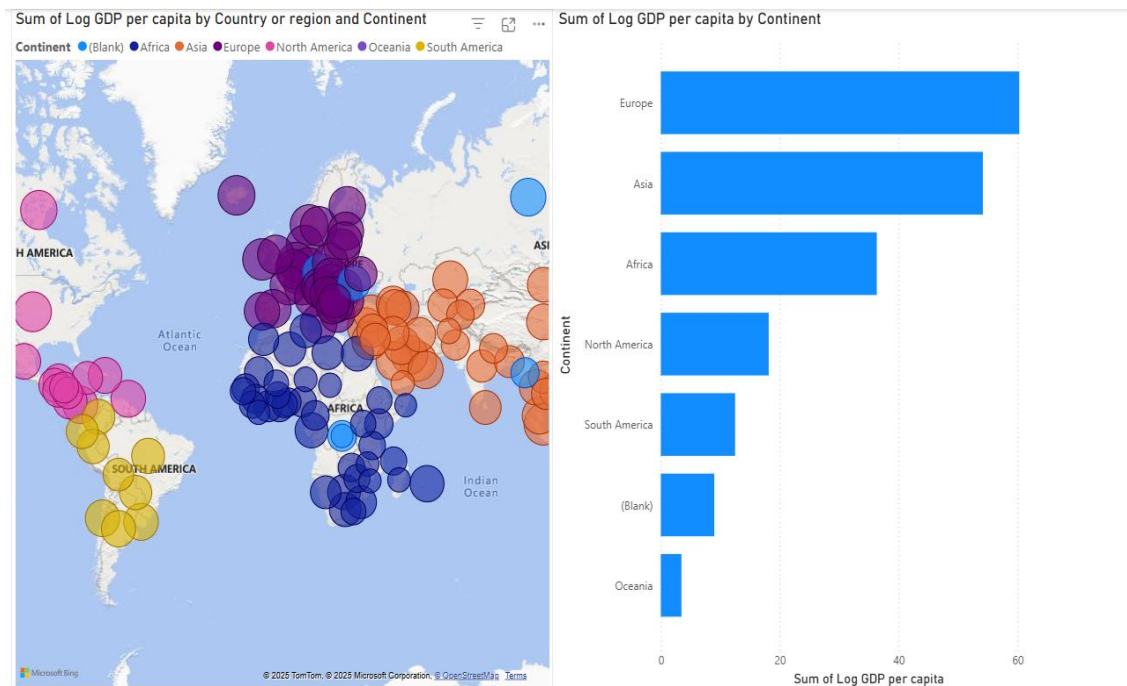
- We can see the score and GDP value in the scatter plot.
- The dots are log GDP values.
- To segregate the data we are using the continents in play axis.
- From the chart we can see the continent wise GDP and score.

STEPS:

- From visualization pane select a scatter plot.
- Drag and drop score to the x-axis and Log GDP per capita to the y-axis.
- Default the columns will be summarized.
- Now we can see the scatter plot.
- Now drag and drop Log GDP per capita into values.

- Drag and drop continents to the play axis.

## MAP:



## INSIGHTS:

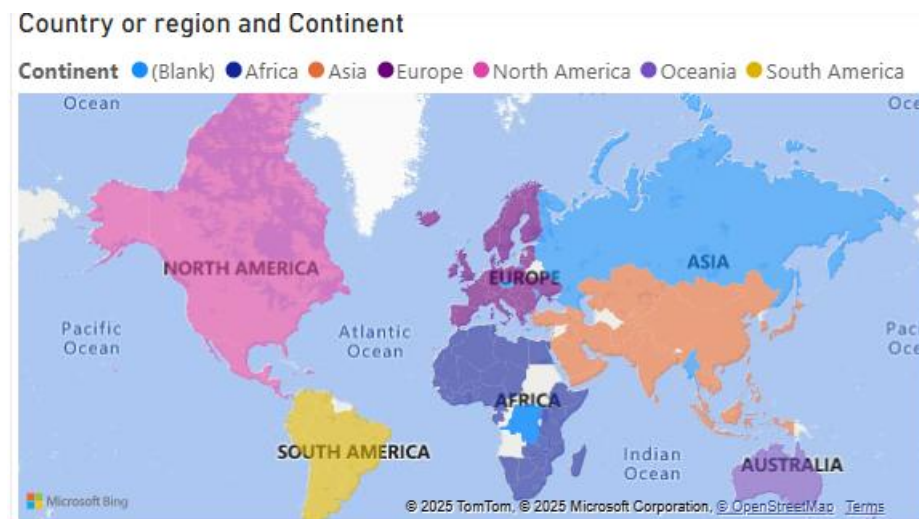
- Map – Sum of Log GDP per capita by Country/Region and Continent
- Each bubble represents a country, with size/color linked to Log GDP per capita.
- Europe and Asia show dense clusters with larger bubbles, suggesting higher GDP per capita compared to Africa and South America.
- Africa has many smaller-sized bubbles, indicating lower GDP per capita values.
- North America and Oceania have fewer bubbles but still contribute significantly.
- Colour coding by Continent helps identify geographical patterns easily.
- Bar Chart – Sum of Log GDP per capita by Continent
- Europe contributes the highest to the sum of Log GDP per capita.
- Asia follows closely behind, reflecting the combined economic size of countries like China, India, and Japan.

- Africa comes next, showing moderate cumulative values but spread across many countries.
- North America and South America contribute less in total because of fewer countries compared to Europe/Asia.
- Oceania has the smallest contribution.
- The “(Blank)” category suggests missing continent data for some countries in the dataset.

#### STEPS:

- Insert a Map visual from the Visualizations pane.
- Drag Country/Region → *Location field*.
- Drag Log GDP per capita → *Size field*.
- Drag Continent → *Legend field* (to apply colours).
- Format options:
  - Turn on bubble sizes scaling.
- Insert a Clustered Bar Chart.
- Drag Continent → *Axis*.
- Drag Log GDP per capita → *Values* (set aggregation as *Sum*).
- Sort by value (descending) for clarity.
- Format chart:
  - Add data labels.
  - Adjust bar colours for consistency.

#### FIELD MAP:



## INSIGHTS:

- Each continent is distinctly colored:
- Africa (dark blue),
- Asia (orange),
- Europe (purple),
- North America (pink),
- South America (yellow),
- Oceania (light purple),
- (Blank) category indicates missing data
- This visualization highlights continent boundaries rather than country-level data.
- It gives a clear global comparison of regions without focusing on GDP.

## STEPS:

- Go to Visualizations pane → Select Filled Map (not bubble map).
- Drag Country/Region → *Location field*.
- Drag Continent → *Legend field*.
- If you want to color based on continent only:
- Leave *Values field* empty.
- Power BI will shade regions by continent.
- Set Map Style: Road/light theme for clarity.
- Enable Category Colors for consistent continent shading.
- Adjust Data Colors so each continent is visually distinct.