**Power BI Sandbox Tasks:**

Comparing the countries that rank top 10 and bottom 10 for quality of life

Transforming the Dataset

* Load the data into Power BI
* Remove the column that contains no data
* Create a new table by duplicating the current table
* Filter the tables so that it only shows data from 2024/2
* Filter one table so that the table only contains countries that rank in the top 10 for quality of life and filter the other table so that the table only contains countries that rank in the bottom 10 for quality of life
* Rename the tables accordingly

Building a Report Page

* Create a clustered bar chart for both tables comparing the quality of life and the safety of these countries.
* Format the visual so that both charts have the same scale along the Y axis.
* Change the titles of each visual to ensure relevancy
* Make any additional adjustments to the formatting of each visualization
* Create a new measure using DAX formulas to get an average for the safety index and the quality of life of the top 10 countries and the bottom 10 countries. (Create 4 measures in total)
* Display these measures on a multi-row card
* Add a text box underneath your visualizations and report card to briefly summarize insights
* Once you have completed a report page, create a bookmark to save the exact state of a report page. You will be able to come back to this at any time, allowing you to create and adjust the filters for your own visualizations.

**Your Turn**

Now create your own report page with your own insights. Be creative with it! 😊

**Hints/Solutions**

**Transforming the Dataset:**

* When importing the data, select ‘Text/CSV’ to import the CSV file.
* To remove the column, you must enter the Power Query Editor. To do this you need to go to Home -> Transform Data. To select a column, click the name of the column. To remove the column, select ‘Remove Columns’ in the home menu.
* To duplicate the table, right-click the table name in Queries and select ‘Duplicate’. Duplicate the original table twice.
* To filter the tables, select the dropdown box adjacent to rank and select the number filter. Select ‘Less than or equal to’ and select the value as 10. This will only show the countries who are in the top 10 for Quality of Life scores. To do the same for the bottom 10, follow the same process, except select ‘Greater than or equal to’ and select the value as 74 (as there are 83 rows within this table).
* Whilst in the Power Query Editor, double click the name of the table to rename the table.

**Building a Report Page:**

* The clustered bar chart is available via the visualizations pane on report view. To add the appropriate filters, tick ‘Country’, ‘Safety Index’, and ‘Quality of Life Index’
* To change the scale of the Y Axis, click the visualization, go to the visualization pane and select ‘Format Your Visualization’. From here, select ‘Y Axis’ (under Visual not General), and adjust the maximum accordingly. 250 would be recommended for these two visualizations.
* In the ‘Format Your Visualization’ section, select ‘General’ and then select ‘Title’ to change the title of each visualization.
* Adjustments can be made within the ‘Format Your Visualization’ section.
* To create a new measure, go to Home -> New Measure and create a new measure. An example of a DAX formula you can use is:

QoL\_average\_top\_ten = AVERAGE(‘*table\_name’*[Quality Of Life Index])

To complete the task, 4 formulas will be required (all utilizing the average function). There should be a formula for the QoL average for the top and bottom 10 countries and a formula for the average Safety Index Score for the top and bottom 10 countries.

* To insert these into a card, select ‘multi-row card’ within the visualizations pane. To include your measures in this card, tick the tick box adjacent to the measure within the data pane.
* To create a bookmark, go to View -> Bookmarks -> Add.

A completed report page may look something like this:

A screenshot of a graph

AI-generated content may be incorrect.: