**Assignment 8: Joining Data from Two Different Publicly Available Datasets**

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# Pre-requisites:

* Make sure you have Google account with GCP access to it
* Make sure you have already enabled BigQuery API

# Task 1: Create two tables

1. Click on “ADD DATA” on Explorer window.

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1. You will see multiple options to import data. You need to choose “Public Datasets” option

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1. Search bar will appear where you can search for datasets.

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1. Search for **Sustainable Development Goals** and select it. Then choose “VIEW DATASET”

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1. Likewise, now search for **World Development Indicators** in the search bar and select it and choose

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1. Now, you can see datasets and tables of selected datasets on Explorer window (if you cannot see then refresh the GCP page)

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1. You can view the data by running below query on SDG dataset

SELECT geoareaname, timeperiod, value FROM `bigquery-public-data.un\_sdg.indicators` as UN\_SDG WHERE seriesdescription =

'Annual growth rate of real GDP per capita (%)' AND timeperiod

= '2016'

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1. You can view the data by running below query on WDI dataset

SELECT country\_name, year, value FROM `bigquery-public-data.world\_bank\_wdi.indicators\_data` as WB\_WDI WHERE

indicator\_name = 'Population, total' AND year = 2016

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# Task 2: join the two tables

1. As in above task we are now able to read data from tables. Now we can join both tables to extract required data
2. To join tables, run following query

SELECT UN\_SDG.geoareaname, UN\_SDG.timeperiod, UN\_SDG.value

as GDP\_per\_Capita\_growth, WB\_WDI.country\_name, WB\_WDI.year, WB\_WDI.value as WB\_Population

FROM `bigquery-public-data.un\_sdg.indicators` as UN\_SDG

JOIN `bigquery-public-data.world\_bank\_wdi.indicators\_data` as WB\_WDI

on WB\_WDI.country\_name = UN\_SDG.geoareaname

WHERE UN\_SDG.seriesdescription = 'Annual growth rate of real GDP per capita (%)'

AND UN\_SDG.timeperiod = '2016'

AND WB\_WDI.indicator\_name = 'Population, total'

AND WB\_WDI.year = 2016;

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# Task 3: Visualize results

1. The results generated from above task can be visualized on Google Data Studio
2. At first, download above results by clicking on “SAVE RESULTS” button and select CSV(local file)

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1. Open URL: <https://datastudio.google.com/> and click on “Blank Report”

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1. Now add data into the blank report by selecting “File Upload”. You can choose downloaded file here. Once you upload file, it will take few moments to get uploaded. Once uploaded, you can click on Add button at the bottom right corner of the screen.

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1. You can add charts and make configurations

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1. Here is my visualization report

Chart, funnel chart

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