**Bigquery/GCS/Excel Activity**

**Goal**

Practice using Bigquery, exporting data to GCS, importing data into excel, and working with charts and lookup tables.

**Description**

You are given two csv files:

student\_exam\_results.csv

* Shows math, reading, and writing scores for each student

student\_list.csv

* Shows student information including gender and year group

Create these two tables in BigQuery. You are tasked with finding the pass rate of students based on their gender and year group. You should create a table containing the following columns: Category (concatenation of gender and year\_group), pass\_rate\_math, pass\_rate\_reading, pass\_rate\_writing, pass\_rate\_all. (Passing score = >60)

EX. (note, these values are not accurate)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category | Pass\_rate\_math | Pass\_rate\_reading | Pass\_rate\_writing | Pass\_rate\_all |
| Male\_Group A | 65.4 | 61.5 | 61.5 | 52.3 |
| Male\_Group B | 67 | 69 | 61.5 | 55.6 |
| Male\_Group C | 73 | 71.3 | 63.2 | 58.1 |
| … | … | … | … | … |

Export this table to a csv file in GCS. You may need to create a bucket first in order to store the file. Download the file to your local machine from GCS and import it into Excel.

In Excel, format the data into an easy to read table. You are then to create a lookup table (use VLOOKUP) to show the pass\_rate\_all for Male\_Group A, Male\_Group E, Female\_Group A, and Female\_Group E. Next, you should create a bar graph showing the pass rate on each of these categories in the lookup table you have created.