





Overview

Important facts before you start

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Important facts before you start

Instructions

Once you receive this email, you will have **24h to submit** your results. You can use the software of your choosing for the analysis and to present your results. We value quality over quantity.

You will have two tasks to complete.

- 1) The first task is a SQL task
- 2) The second task is split in two parts:
 - a) A first part more technical based on github and python/pandas
 - b) A second one more business oriented.



Task 1

<u>SQL</u>

Input tables

bigquery-public-data.usa_names.usa_1910_2013 bigquery-public-data.samples.natality

Task:

- 1) Get access to input tables (Public datasets are stored for Free from BQ + 1st Terabyte of computational power is free of charge)
- 2) Is the last letter of the Name a good proxy for Gender?
- 3) Gender Mix development across years in USA.
 What is the year with the highest % of Female names from 1920 until now?
 Is there any peculiar development you may notice when looking at the share of Female Vs Male names?
- 4) What was the 4th most common male name in the 60's?

The results will have to contain the SQL code and plot/histograms supporting your answers.



Task 2.1

Technical

Context:

An E-commerce company strategy to price on international markets was based on this input file "Old_multiplier.csv".

Such file contains **country multipliers** to set the prices of an item belonging to a category or sub-category in other countries.

Over time, the business decided to re evaluate the country multipliers with updated market prices from this input "MarketPriceSampleCaseStudy.csv".

Your task is to evaluate the new country multipliers and provide business insight on them.

The zip file provides two input files:

- 1) MarketPriceSampleCaseStudy.csv
- 2) Old_multiplier.csv

File 1) has all the information you need to evaluate the country multipliers.

Requirements:

a) Provide a table with the country multipliers for all countries keeping DE as the baseline:

The country multiplier has to be evaluated at different granularity:

- Per category
- ii) Per sub_category



Task 2.2



Business

Once completed the technical task, we will like you to evaluate the business sense of changing the multipliers.

Question:

- 1) Given the differences between the "Old" and "New" multipliers;
 - a) Can you please reason what could be the drivers for these differences?
 - b) Given your reasoning above, why do you think Home24 decided to make this change? What are the benefits and pitfalls of this approach?
- 2) Please provide a concept suggestion with a list of broad strokes for a different approach on how to price articles across different countries.
- 3) Bonus Points on any additional thoughts on International Pricing for Furniture/Home Living Ecommerce.

