

foodpanda Technical Test

For this technical test, please execute the tasks to the best of your understanding. Leave comments where appropriate if you had to make assumptions or to explain your reasoning and understanding of the task set.

Part 1 - SQL

To work on these questions two .csv files have been provided. Please ensure you have these files before proceeding:

- 1) orders.csv
- 2) vendors.csv

You may wish to study the data in both datasets carefully before attempting the exercise. We recommend loading the datasets on a BigQuery sandbox (<https://cloud.google.com/bigquery/docs/sandbox>) as an environment for you to write and test your queries.

Please attempt to write SQL queries that answer the following problems. Retain the queries for [Part 2 - Submitting the Data Model](#).

Expected answers are provided for reference.

1 - Find the Total GMV by country

Expected answer:

Row	country_name	total_gmv
1	Taiwan	17889.23
2	Singapore	3424.75
3	Thailand	1658.26

2 - Calculate the GMV of vendors in Taiwan and order the result their customer count

Expected answer:

Row	vendor_name	customer_c...	total_gmv
1	Sweet Chinese Desserts	14	13491.41
2	I LOVE PIZZAAAAAAAAAAAA	6	4397.82

3 - Find the top active vendor by GMV in each country

Expected answer:

Row	country_name	vendor_name	total_gmv
1	Singapore	IC House	1924.96
2	Taiwan	Sweet Chinese Desserts	13491.41
3	Thailand	9th Cafe House	1658.26

4 - Find the top 2 vendors per country, in each year available in the dataset

Expected answer:

Row	year	country_name	vendor_name	total_gmv
1	2012-01-01T00:00:00	Singapore	IC House	119.34
2	2012-01-01T00:00:00	Singapore	Canada Paste	89.64
3	2012-01-01T00:00:00	Taiwan	I LOVE PIZZAAAAAAAAAAAAA	1613.2
4	2012-01-01T00:00:00	Taiwan	Sweet Chinese Desserts	596.1
5	2012-01-01T00:00:00	Thailand	9th Cafe House	1658.26
6	2014-01-01T00:00:00	Singapore	IC House	1805.62
7	2014-01-01T00:00:00	Singapore	WS (BM)	768.83
8	2014-01-01T00:00:00	Taiwan	Sweet Chinese Desserts	12895.31
9	2014-01-01T00:00:00	Taiwan	I LOVE PIZZAAAAAAAAAAAAA	2784.62

Part 2 - Submitting the Data Model



2.1 - Preparing a GitHub Repository

- Ensure that you have a personal [Github](#) account.
- Click on “Use this template” on the repository at <https://github.com/gk-fp/foodpanda-test-submission>.

Follow the instructions to create a new private repository on your own Github account, example shown below.


Create a new repository from foodpanda-test-submission


The new repository will start with the same files and folders as [gk-fp/foodpanda-test-submission](#).

Owner ^{*}  gk-fp ^{*} Repository name ^{*} 


Great repository names are short and memorable. Need inspiration? How about [legendary-octo-invention](#)?

Description (optional)

☐  **Public**
Anyone on the internet can see this repository. You choose who can commit.

☒  **Private**
You choose who can see and commit to this repository.

☐ **Include all branches**
Copy all branches from gk-fp/foodpanda-test-submission and not just main.

 You are creating a private repository in your personal account.

[Create repository from template](#)

- Click on “Settings > Collaborators > Add people”

[gk-fp / template-for-submission](#) Private
generated from [gk-fp/foodpanda-test-submission](#)

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Security](#) [Insights](#) [Settings](#)

General

Access

Collaborators

Code and automation

Branches

Tags

Actions

Webhooks

Pages

Security

Code security and analysis

Deploy keys

Secrets

Integrations

GitHub apps

Email notifications

Who has access

PRIVATE REPOSITORY


Only those with access to this repository can view it.

[Manage](#)

DIRECT ACCESS

0 collaborators have access to this repository. Only you can contribute to this repository.

Manage access



You haven't invited any collaborators yet

[Add people](#)

and add the following collaborators: **alvin-chua**, **shaznishoffie**, **ruiyi-yap**, **jaclynlimht**, **kaydentay**, **aetius-tan**, **eddytrang**, **TahaJamal92**

Your screen should look something like below when completed:

<input type="checkbox"/>		Lusiana Djie lusianadjie-fp
<input type="checkbox"/>		Shaz shaznishoffie
<input type="checkbox"/>		sweeteng-ng-fp

2.2 - Building a DBT Model

In this section, we would like you to create files for a dbt data model. Tools like dbt are fast becoming important in making the data analyst workflow much simpler.

Note that you are NOT expected to create the entire dbt environment on your local machine nor do you need to do a dbt run on the files created.

Do your best to understand the documentation for the tool and prepare the files accordingly. Here are examples of the required files.

```
{{
  config(
    | materialized = 'view'
  )
}}

WITH customers AS (
  | SELECT
  |   customers_id,
  |   ...
  | )
  ...
```

```
models:
  - name: q1
    description: >
      Answer to Q1 of take home test
    meta:
      | owner: candidate@foodpanda.com
    columns:
      - country_name
      | description: Name of country.
      - total_gmv
      | description: GMV calculated for each country.
```

- A. Branch the repository and give it a name “ADT-XXX-*<yourname>*” replacing the placeholder *<yourname>* with your first and last name or other unique identifier. Switch to this branch before making any further changes.
- B. Please review the documentation at <https://docs.getdbt.com/guides/getting-started> on the dbt tool. For the purpose of this assignment, you can focus on the section “[Building your first project > Build your first models](#)”, however it is recommended that you review the other sections as well to ensure that you have a good understanding of the tool.

Please note the following points carefully:

- a. It bears repeating that the purpose of this section is to test your understanding of the dbt tool through reading of documentation. As we will not use dbt Cloud in this test, commands such as dbt debug/dbt run WILL NOT work on your local machine and this

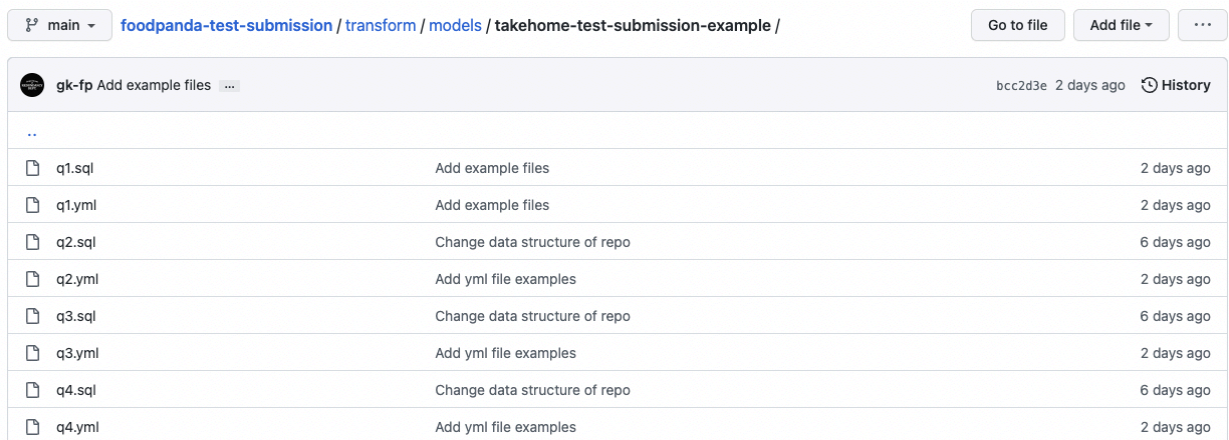
is the expected behavior. However, feel free to explore dbt Cloud if it helps in your understanding of dbt.

- b. It is recommended that you use a code editor such as [Sublime, VS Code, VIM, Notepad++, any other of your liking] to write these files, however this is not strictly necessary and changes can be made directly in the branch on Github if you choose to do so.
 - c. If using a code editor, remember to clone your repository to your local machine.
 - d. Once again, you are reminded that you DO NOT NEED to set up dbt on your local machine.
- C. Create a new folder to store the files that you are creating for this submission, place this new folder in “transform/models”.
- DO NOT overwrite the folder “transform/models/takehome-test-submission-example/”.*
- D. Please write each file with the assumption that the dbt tool will run the code automatically. You will be assessed on the relevance of configurations chosen for this problem.
- E. Finally, make a new file that references at least one of the tables you created as part of steps C & D. The query can be as complicated or as simple as you want but should showcase that you have understood how DBT works when using the ref function.

Reference: <https://docs.getdbt.com/reference/dbt-jinja-functions/ref>

2.3 - Submitting a Pull Request

- A. Please update your branch with your code for the 4 questions above in q1.sql, q2.sql, q3.sql and q4.sql in the new files created. An empty example is provided in the repository under “transform/models/takehome-test-submission-example”.



main		foodpanda-test-submission / transform / models / takehome-test-submission-example /		Go to file	Add file	...
gk-fp Add example files bcc2d3e 2 days ago History						
..						
q1.sql	Add example files			2 days ago		
q1.yml	Add example files			2 days ago		
q2.sql	Change data structure of repo			6 days ago		
q2.yml	Add yml file examples			2 days ago		
q3.sql	Change data structure of repo			6 days ago		
q3.yml	Add yml file examples			2 days ago		
q4.sql	Change data structure of repo			6 days ago		
q4.yml	Add yml file examples			2 days ago		

- B. Be sure to include all files created in Steps C and E of Section 2.2.
- C. Look for the empty files order.csv and vendors.csv in the repository and replace them with the data files included in this test.
- D. Submit a pull request for your branch with
- a. A clear and concise title
 - b. A description that explains the work done
- E. Merge the changes.

Part 3 - Data visualization

- Explore the Chicago Taxi Trip public Dataset from BigQuery (https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=chicago_taxi_trips&page=dataset)
- Download Tableau Desktop (<https://public.tableau.com/en-us/s/>) or utilize Google Data Studio for this visualization exercise
- Create a story/dashboard(s) using Tableau or Data Studio (<https://help.tableau.com/current/pro/desktop/en-us/stories.htm>)
- Attach the final workbook (tableau public or data studio public link) along with a PDF export in the greenhouse link provided and be prepared to do a 15 minutes presentation on that workbook onsite/via call
- Take note that there is a daily quota limit for BigQuery in the free tier, see <https://cloud.google.com/free/docs/free-cloud-features#free-tier-usage-limits>

Note: If you're using data studio, please make sure the dashboard view settings is set to public

Reminders on Submission:

Include the following in a PDF in your submission via email.

- a. Github username
- b. Name of your Github repository
- c. Link to your Github repository
- d. Public link/PDF to your Dashboard

Remember to add the following list of collaborators to your Github repo:

1. alvin-chua
2. shaznishoffie
3. ruiyi-yap
4. jaclynlimht
5. kaydentay
6. aetius-tan
7. eddytrang
8. TahaJamal92