Task 1:

From the transactions table and the store names table, create a local temporary table that has the total sales per store. Achieve this with the following columns:

1. store\_ID

2. store\_name

3. total\_sales

4. total\_transactions

CREATE TEMPORARY TABLE total\_sales\_per\_store AS

SELECT t.but\_idr\_business\_unit AS store\_ID

, sn.but\_name\_business\_unit AS store\_name

, SUM(t.f\_qty\_item\*t.to\_tax\_in) AS total\_sales

, COUNT(\*) AS total\_transactions

FROM transactions t

JOIN store\_names sn ON sn.but\_idr\_business\_unit=t.but\_idr\_business\_unit

GROUP BY 1,2;

Task 2:

From the members table, create a local temporary table with all the columns and three additional columns:

1. current\_date

2. days\_since\_last\_purchase

3. activity\_status:

a. Active: last purchase <= 12 months

b. Inactive: last purchase > 12 months

CREATE TEMPORARY TABLE members\_adtll AS

SELECT \*

, CURDATE() AS current\_date

, TIMESTAMPDIFF(DAY, NOW(), last\_purchase\_date) AS days\_since\_last\_purchase

, CASE WHEN TIMESTAMPDIFF(DAY, NOW(), last\_purchase\_date) > 12 THEN ‘Inactive’ ELSE ‘Active’ END AS activity\_status

FROM members;

Using R/Python, you are asked to discover other points of the business by investigating

the following:

1. Produce a report of the top 5 models per month in **physical stores**. How much

sales did they generate and what is its contribution (proportion in %) to overall

sales?

|  |  |  |
| --- | --- | --- |
| mdl\_num\_model\_r3 | f\_to\_tax\_in | perc\_contribution |
| 8502149 | 2934104 | 0.396134 |
| 8506243 | 2774115 | 0.374534 |
| 8331381 | 2689290 | 0.363081 |
| 8351755 | 2683195 | 0.362258 |
| 8387956 | 2425679 | 0.327491 |

2. What is the ratio of identified transactions (transactions made by members) per

store? Rank them from highest to lowest.

|  |  |
| --- | --- |
| but\_name\_business\_unit | member\_transaction\_ratio |
| but\_name\_business\_unit | member\_transaction\_ratio |
| Masinag | 0.846668 |
| Pasig | 0.827904 |
| Decathlon Dasmarinas | 0.818187 |
| Alabang | 0.810728 |

3. Find the average basket value and average basket size per store. Which stores

are performing well? Which ones are not? Please state your consideration(s).

* Pasig has the best performance, having the highest average basket value.
* Alabang is the best performer in terms of average basket value combined with average basket size, wherein despite average basket size being the lowest among the four stores, it generated the second highest average basket value, implying that more expensive SKUs are being sold.
* Masinag is doing the most poorly among the stores with the lowest average basket value, with Decathlon Dasmarinas coming in second.

|  |  |  |
| --- | --- | --- |
| but\_name\_business\_unit | average\_basket\_value | average\_basket\_size |
| Alabang | 461.5904 | 1.000309 |
| Decathlon Dasmarinas | 432.5599 | 1.003537 |
| Masinag | 431.2185 | 1.000382 |
| Pasig | 468.4371 | 1.002574 |

4. If there is any timing of the day that is most popular

2PM is the most popular time of day for both online and offline transactions.

|  |  |
| --- | --- |
| 14 | 205401 |
| 16 | 187269 |
| 18 | 182153 |
| 17 | 181367 |
| 15 | 180682 |