BA710

Winter 2023 Case

25 Marks

Due Sunday April 9, 2023

SUDISH BASNET, 301250603

**Deliverable details:**

Complete all questions in this Word document.

Complete the SQL template.

Your source data must be loaded to a schema called BA710case.

Your work data must be loaded to a schema called Work.

Your work tables must include “case\_” as a prefix to the table name you choose.

**Premise:**

You work at a company that manufactures and sells electric scooters. You have been told that the pre-orders for the Bat Scooter were initially good, but the orders suddenly dropped by 20%.

Your job is to investigate the situation and test some general hypotheses on why this might have occurred, post hoc.

Since our company headquarters is in Toronto, we need to make sure your dates are stored in Eastern time. The easiest way to do this is to set the time zone in the top of your code:

**/\*Set Time Zone\*/**

**set time\_zone='-4:00';**

**Part 1:**

Complete an analysis of the sales patterns for the Bat scooter. Perform a comparative analysis with the Bat Limited Edition and the Lemon 2013 scooters. Your resulting table for each scooter should have:

1) Daily sales amount

2) Cumulative sales

3) Cumulative sales for a seven day period beginning with the current record and adding the previous 6 records.

4) Percentage change in cumulative sales compared to the same point seven days prior.

**Example Sales Analysis for the Blade Scooter:**

**Table

Description automatically generated**

Percentage growth in cumulative\_sales from 6/23 to 6/30

Total sales 7/2 – 7/8

Total sales 6/23 – 6/29

Counts up for each record

Percentage growth in cumulative\_sales from 7/8 to 7/1

(63559 – 39899) /39899 = 59.29

**Paste your Bat Sales Analysis table:**

Graphical user interface, application

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer: For the first sale date 2016-12-06, the cumulative weekly sales growth drop below 10% and 904 total data fall below 10%

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer: It take 57 days since the launch date for cumulative sales growth to drop below 10%

**Paste your Bat Limited Sales Analysis table:**

Graphical user interface, application

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer: sales dropped by 10% since 2017-04-29 and the total number of data that dropped below 10% is 742

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer: sales dropped after 73 days of opening

Question: Is there a difference in the behavior in cumulative sales growth

between the Bat edition and the Bat Limited edition? (Make a statement comparing

the growth statistics.)

Answer: The sales growth for Bat limited edition in comparison to BAT edition. For a look, it took 73 days for bat limited edition to drop sales below 10% while it took only 57 days to drop sales below 10% for bat edition. Moreover, the total number of dropped sales is only 742 for bat limited edition while the total number for bat edition is 904. Regarrding opening date, the bat limited edition launched in the initial month of year while bat edition launched in October while the cumulative sale for 7 days were higher mostly for bat edition than bat limited edition.

**Paste your Lemon 2013 Sales Analysis table:**

Graphical user interface, application, table

Description automatically generated

Question: On what date does the cumulative weekly sales growth drop below 10%?

Answer: sales dropped by 10% since 2010-06-11 and the total number of data that dropped below 10% is 2707

Question: How many days since the launch date did it take for cumulative sales growth

to drop below 10%?

Answer: sales dropped after 77 days of opening

Question: Is there a difference in the behavior in cumulative sales growth

between the Bat edition and the 2013 Lemon edition? (Make a statement comparing

the growth statistics.)

Answer: There is a vast difference in behavior in cumulative sales growth between the bat edition and the 2013 lemon edition. Although it took time to drop sales below 10% for lemon as bat limited edtion but the total sales which were below 10% was way higher in the count of 2707. And the overall daily sales is way less in comparison to bat edition as well. But both the edition were lunched in October, so it looks like October may be the unfavourable month for lunching.

**Part 2:**

**Coming next week.**