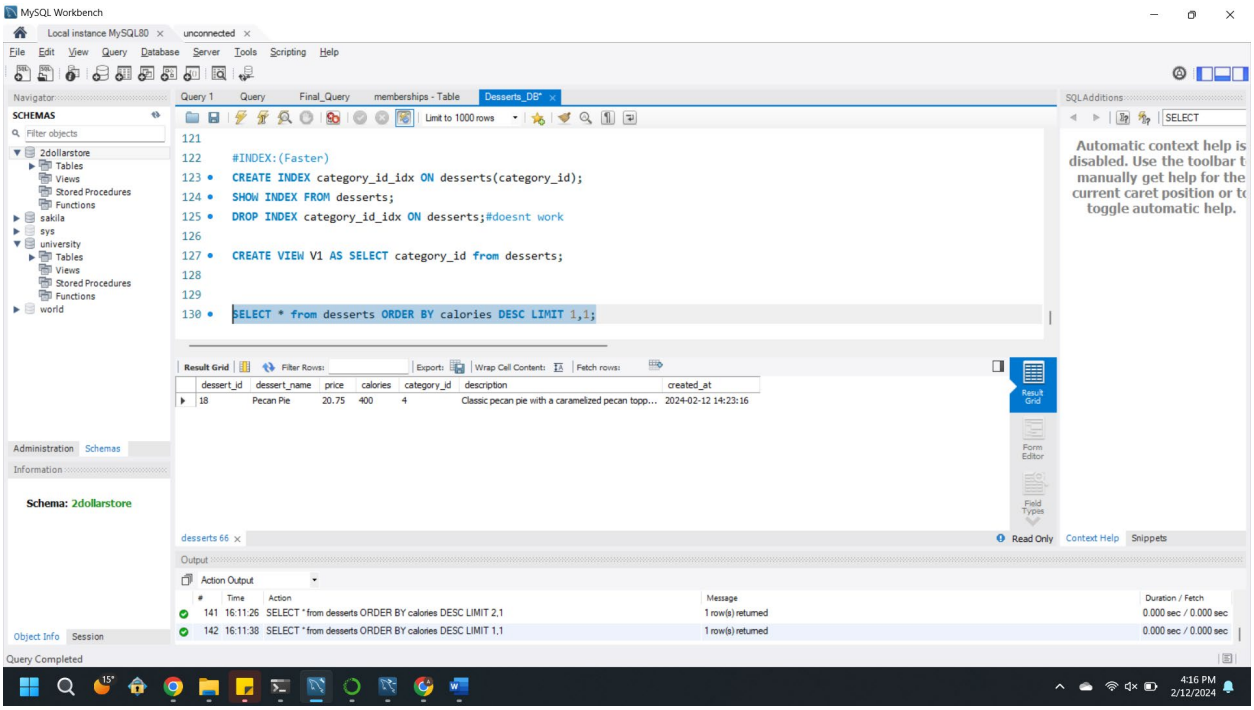
Homework2_AparnaBharathiSuresh

Question 1:

Display the 2nd highest calorific dessert.

Screenshot 1:



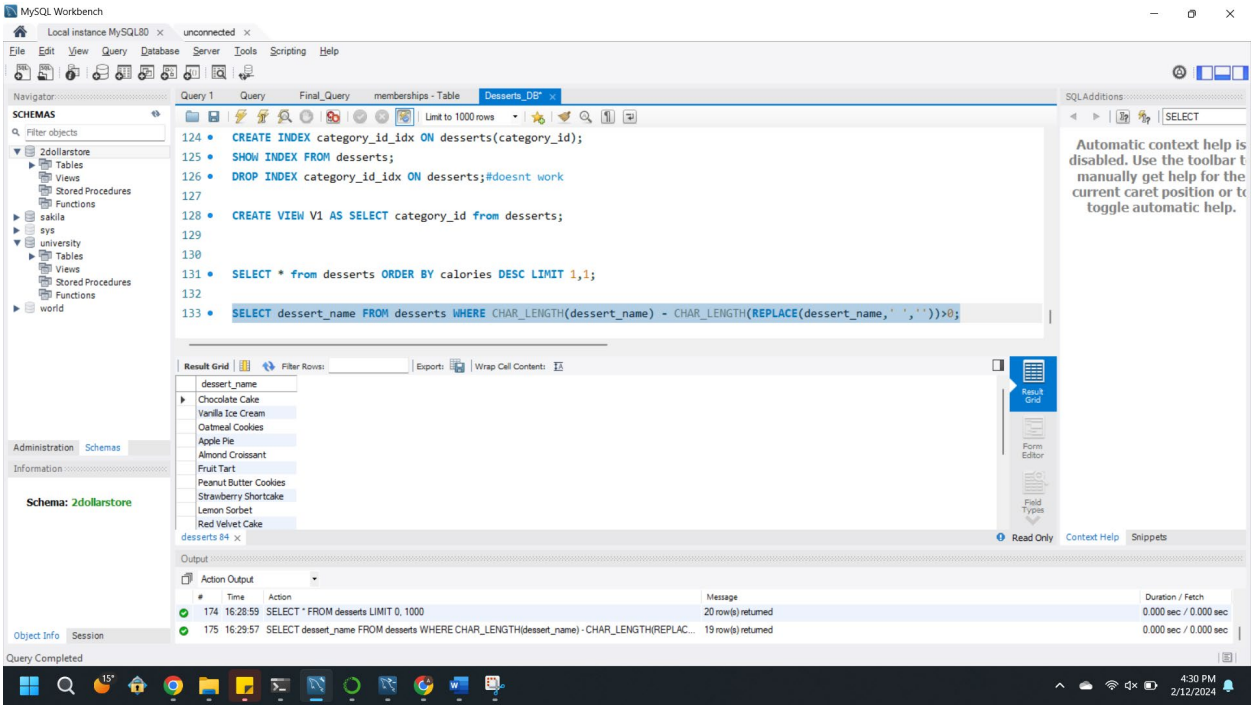
Query 1:

SELECT * from desserts ORDER BY calories DESC LIMIT 1,1;

Question 2:

Find the desserts that have more than one word in their name. Display the dessert name.

Screenshot 2:



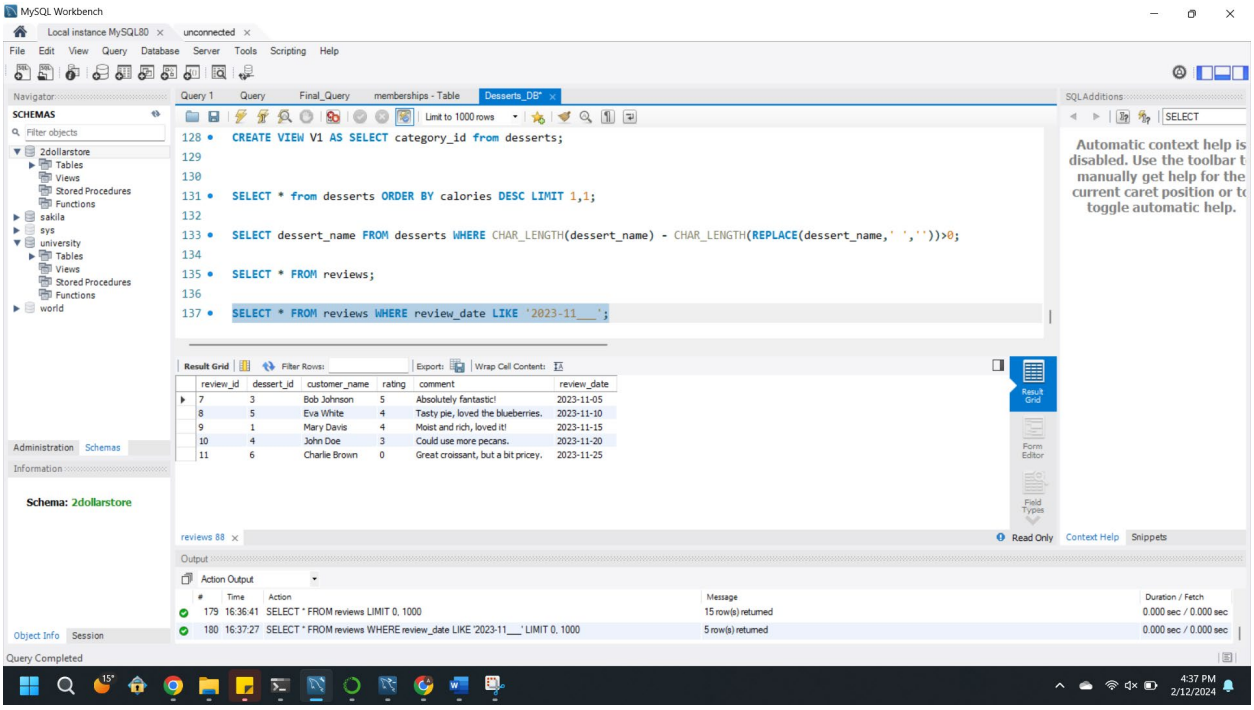
Query 2:

SELECT dessert_name FROM desserts WHERE CHAR_LENGTH(dessert_name) - CHAR_LENGTH(REPLACE(dessert_name,' ',''))>0;

Question 3:

Find the reviews that were given in the month of November 2023.

Screenshot 3:



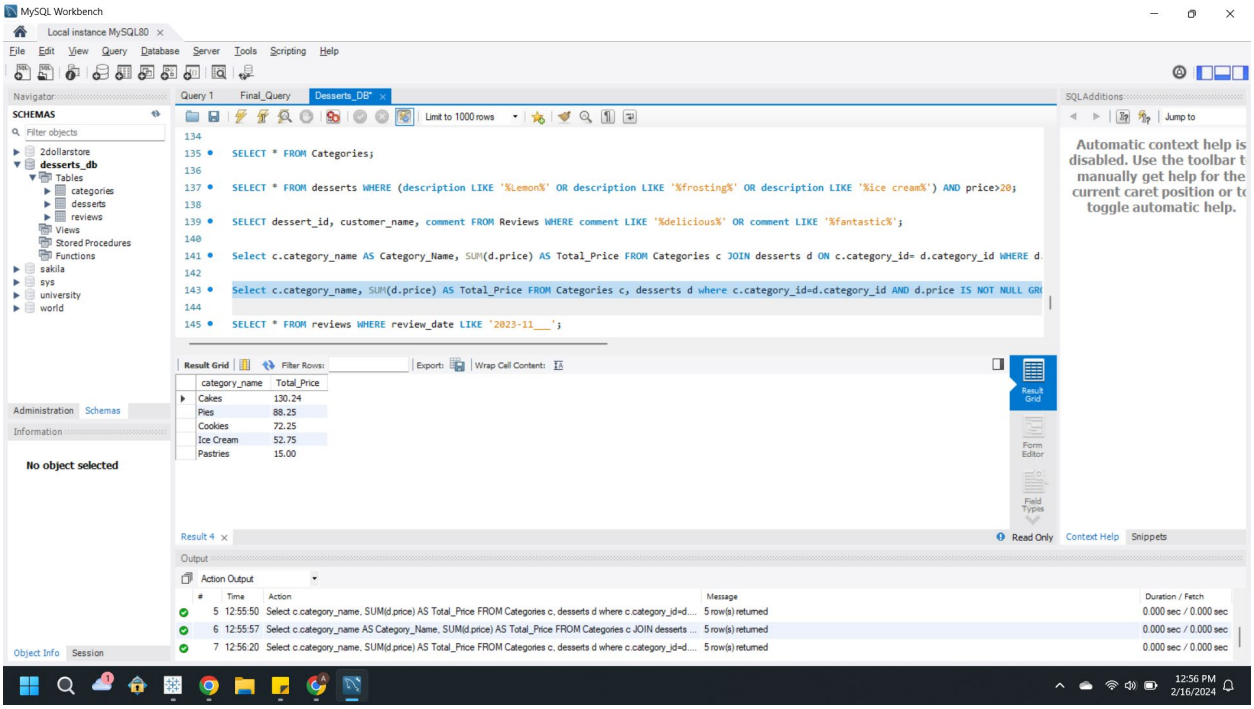
Query 3:

SELECT * FROM reviews WHERE review_date LIKE '2023-11___';

Question 4:

Calculate the total price for each category, considering only desserts with a price. Display the category name and total price (use Total_Price as the column alias) and order the results by total price in descending order.

Screenshot 4:



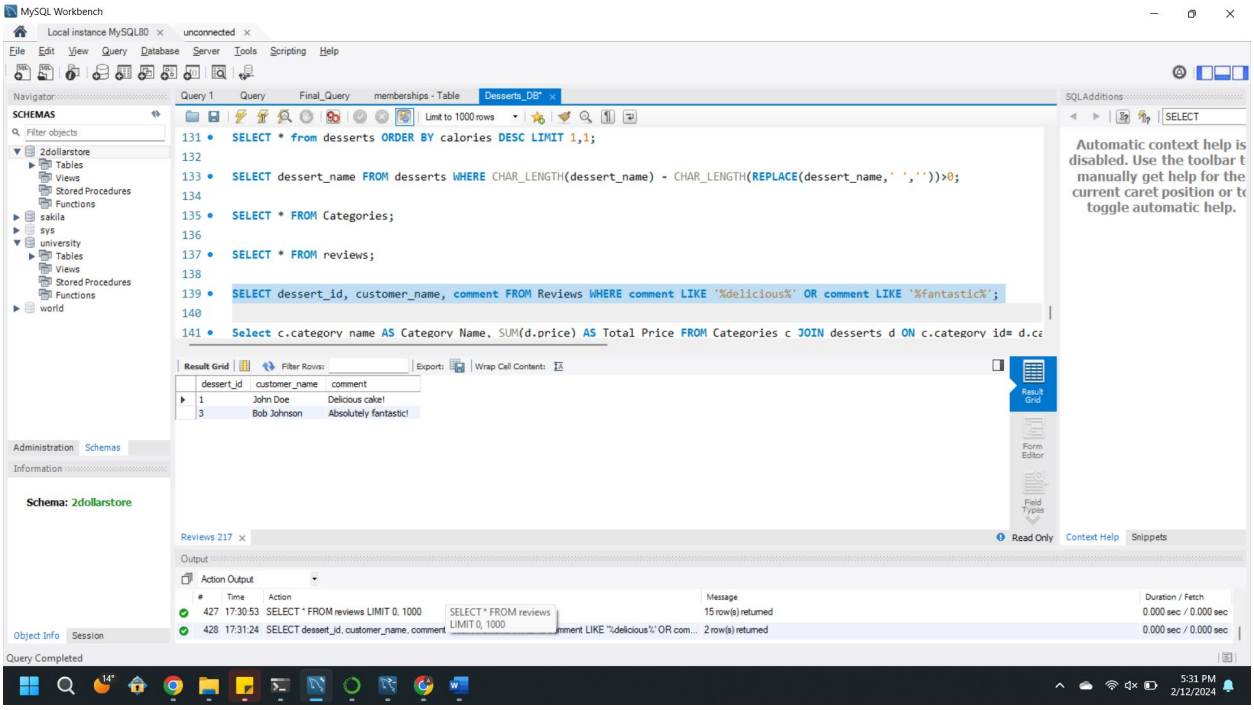
Query 4:

Select c.category_name, SUM(d.price) AS Total_Price FROM Categories c, desserts d where c.category_id=d.category_id AND d.price IS NOT NULL GROUP BY c.category_id ORDER BY Total_Price DESC;

Question 5:

Find the desserts that have reviews with comments containing the word 'delicious' or 'fantastic'. Display the dessert id, customer name, and comment.

Screenshot 5:



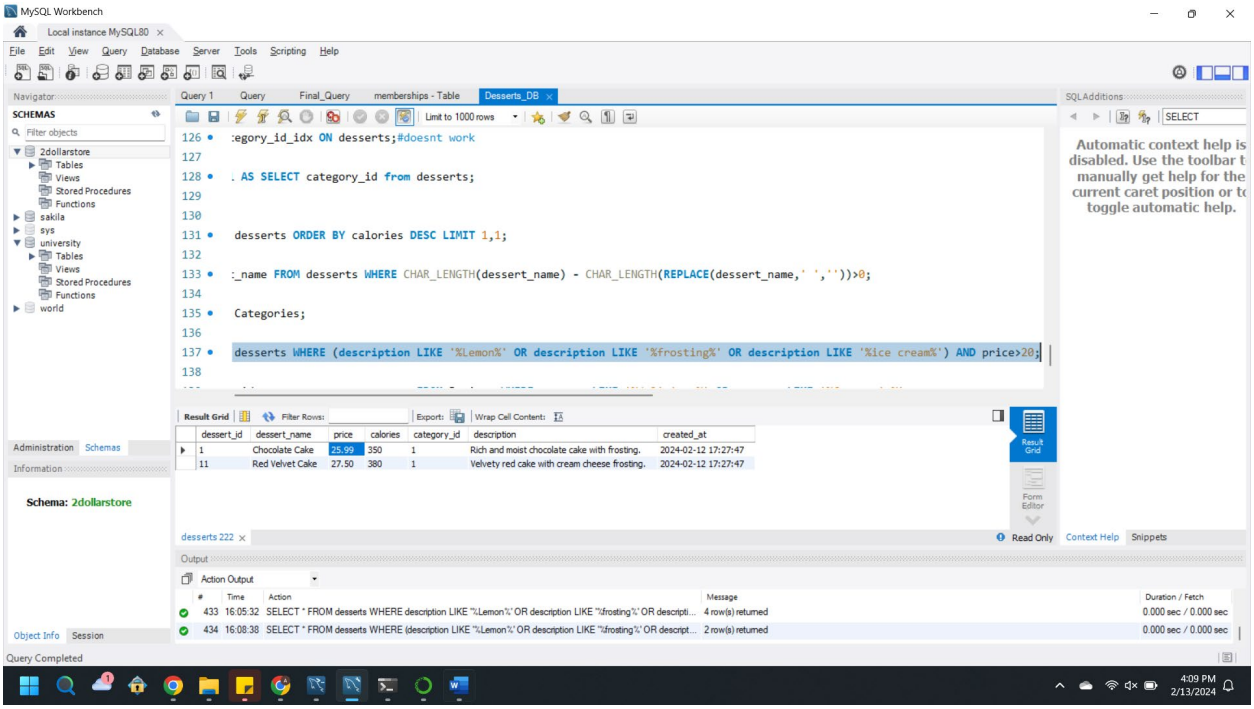
Query 5:

SELECT dessert_id, customer_name, comment FROM Reviews WHERE comment LIKE '%delicious%' OR comment LIKE '%fantastic%';

Question 6:

Display the desserts where the description has one of the words ‘Lemon’, ‘frosting’ or ‘ice cream’ and the price is more than $20.

Screenshot 6:



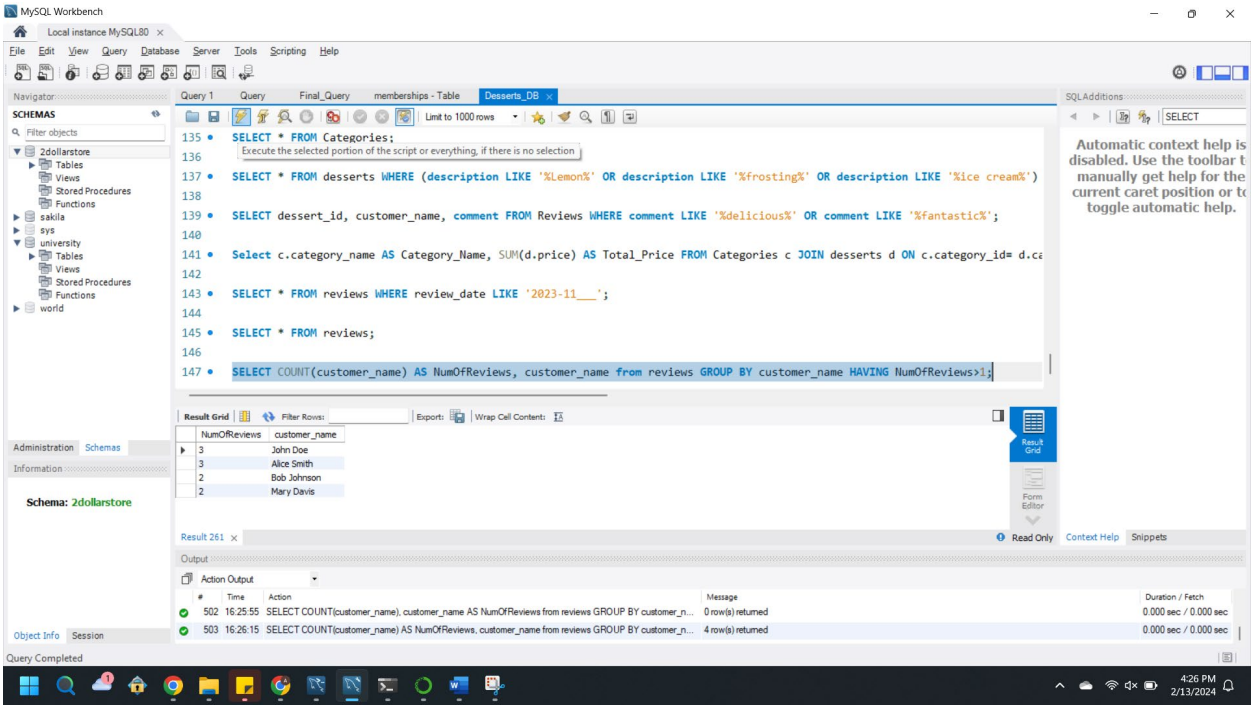
Query 6:

SELECT * FROM desserts WHERE (description LIKE '%Lemon%' OR description LIKE '%frosting%' OR description LIKE '%ice cream%') AND price>20;

Question 7:

Display the number of reviews given by each customer, if the number of reviews is more than 1.

Screenshot 7:



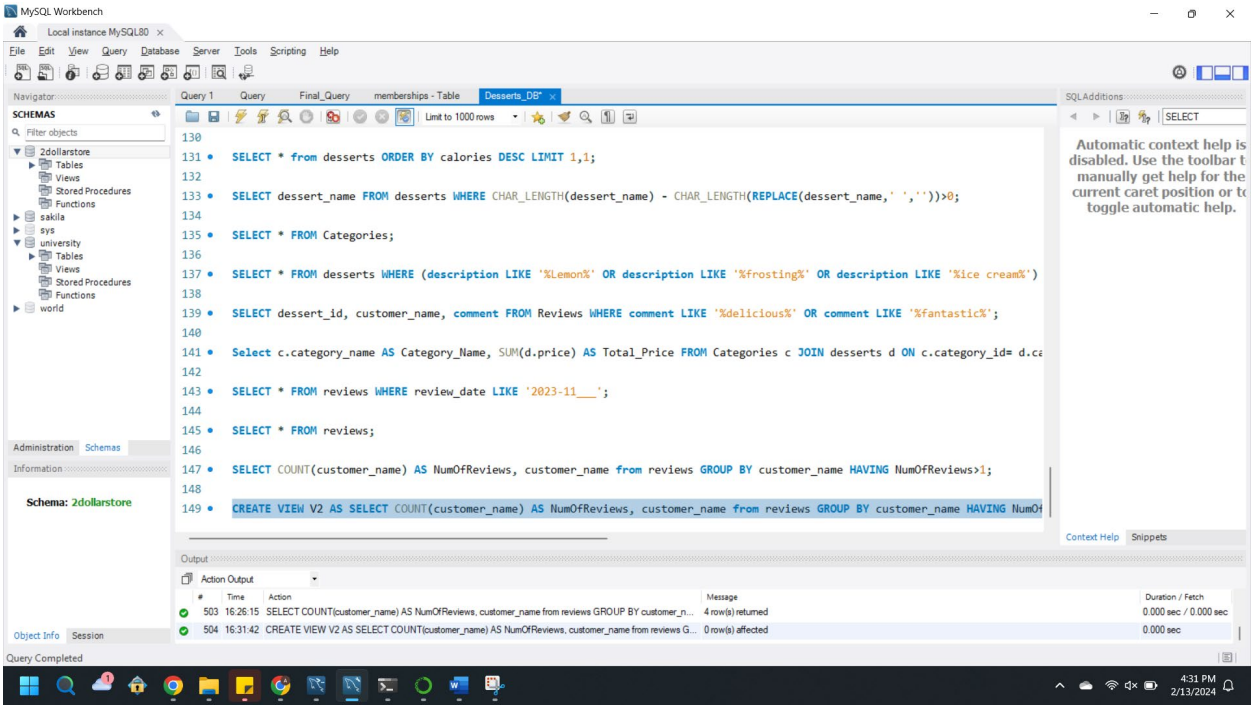
Query 7:

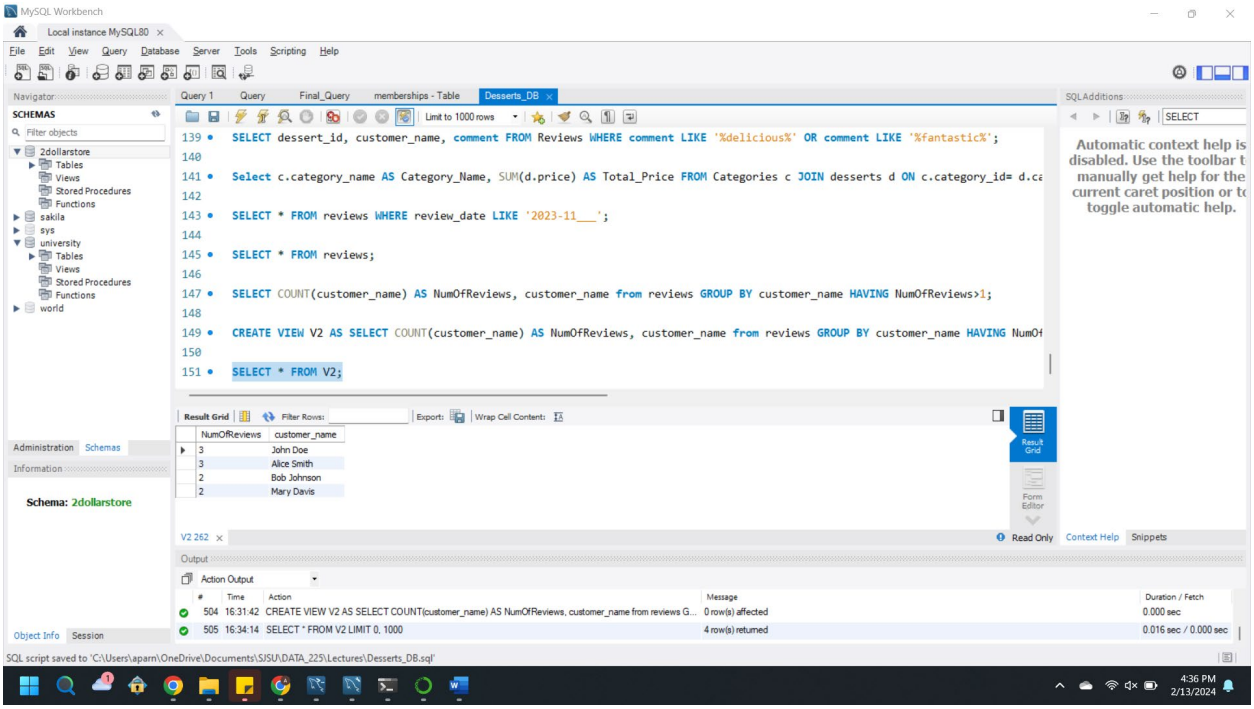
SELECT COUNT(customer_name) AS NumOfReviews, customer_name from reviews GROUP BY customer_name HAVING NumOfReviews>1;

Question 8:

Create a view for question 7

Screenshot 8:





Query 8:

CREATE VIEW V2 AS SELECT COUNT(customer_name) AS NumOfReviews, customer_name from reviews GROUP BY customer_name HAVING NumOfReviews>1;

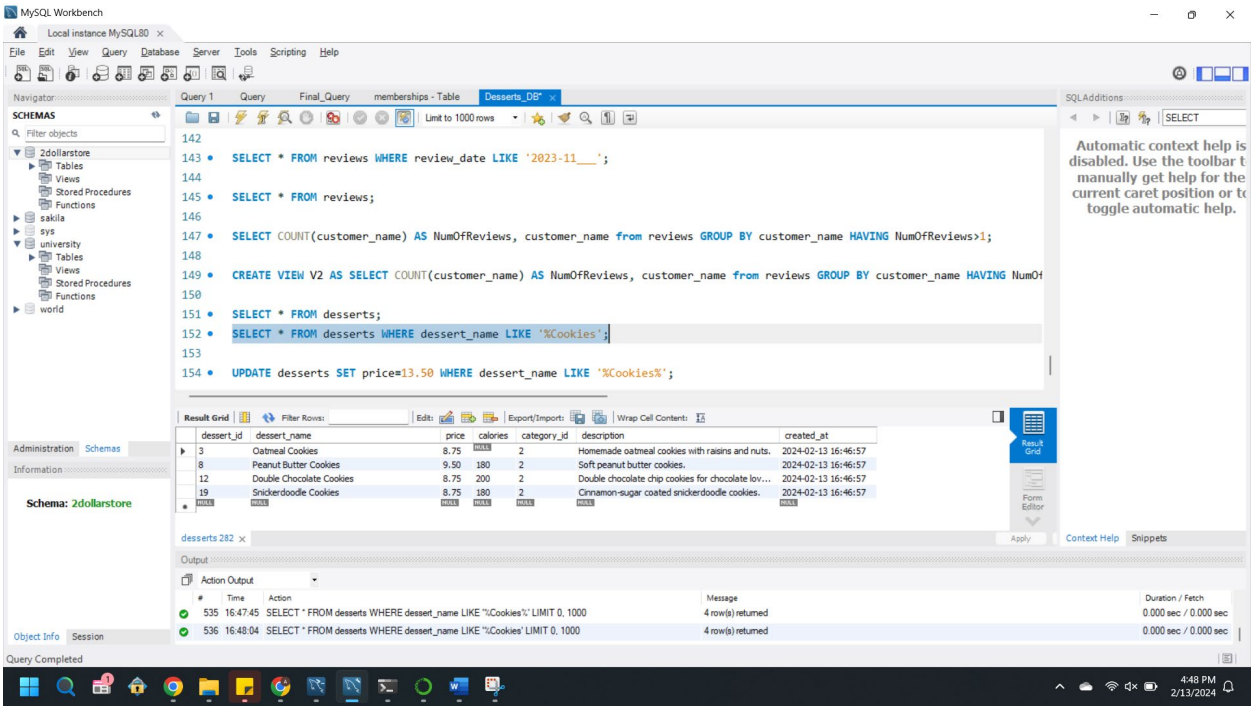
SELECT * FROM V2;

Question 9:

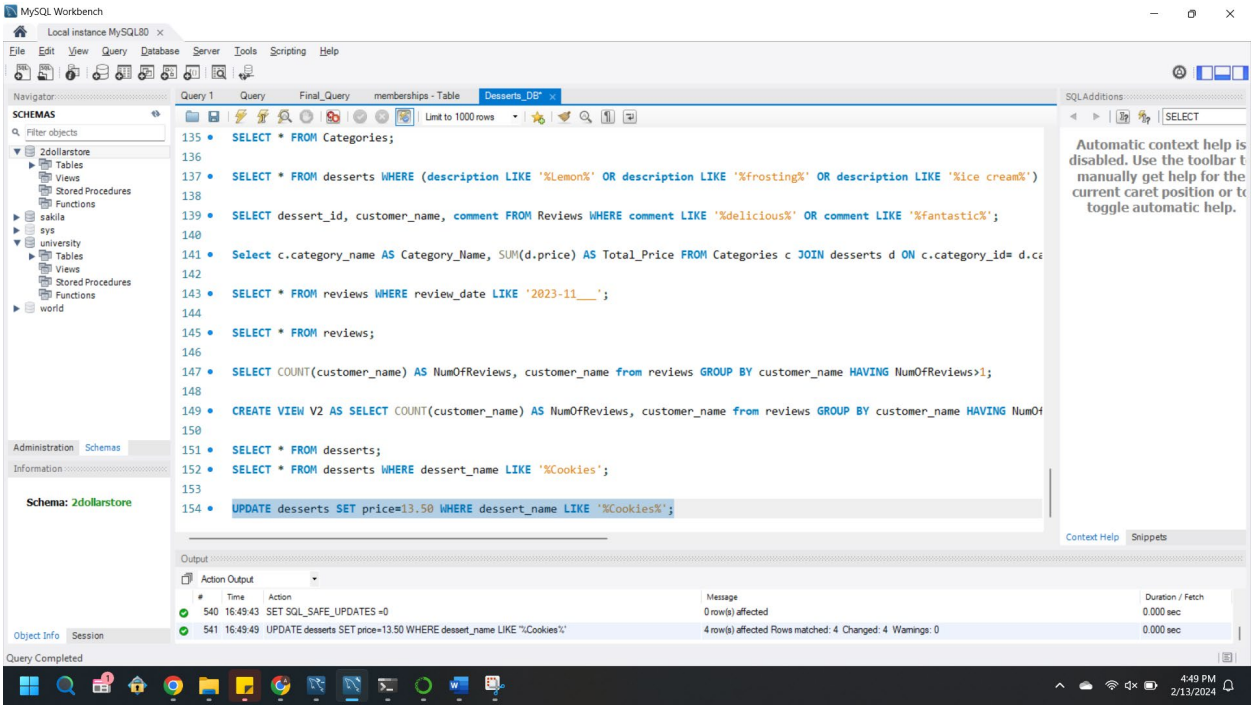
Set the price of all cookies to $13.50.

Screenshot 9:

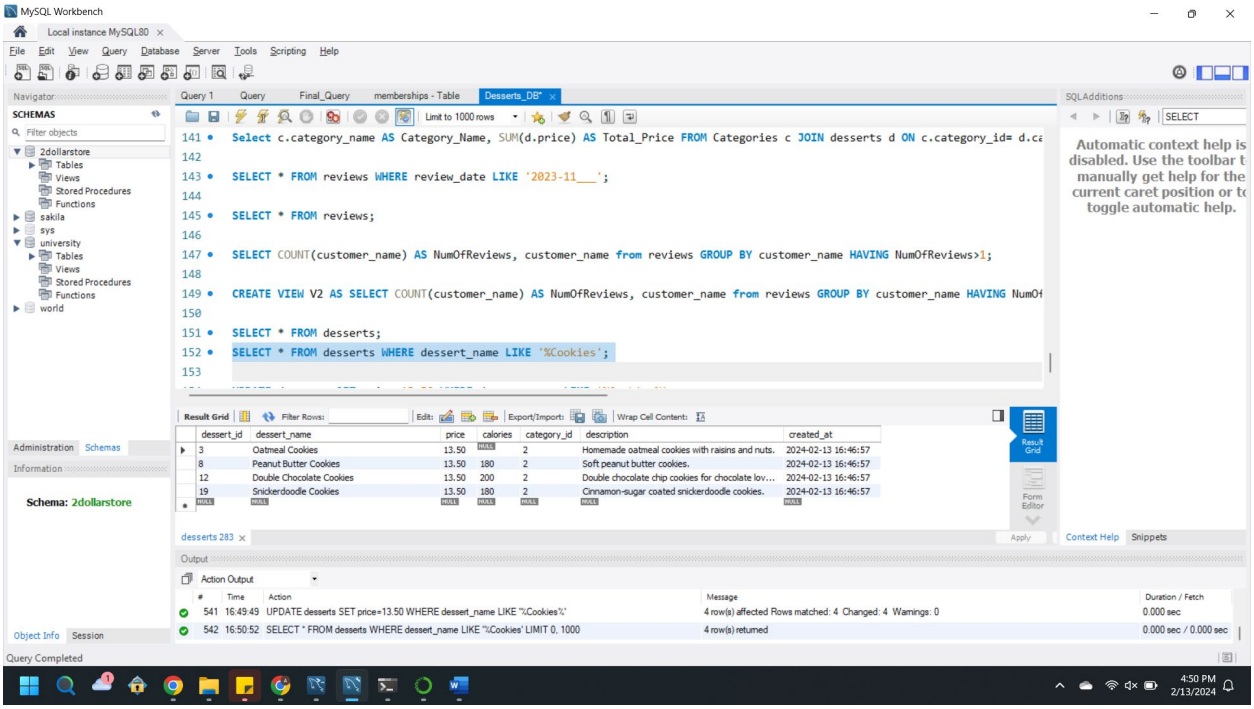
Before Update



Update:



After Update:



Query 9:

UPDATE desserts SET price=13.50 WHERE dessert_name LIKE '%Cookies%';

Question 10:

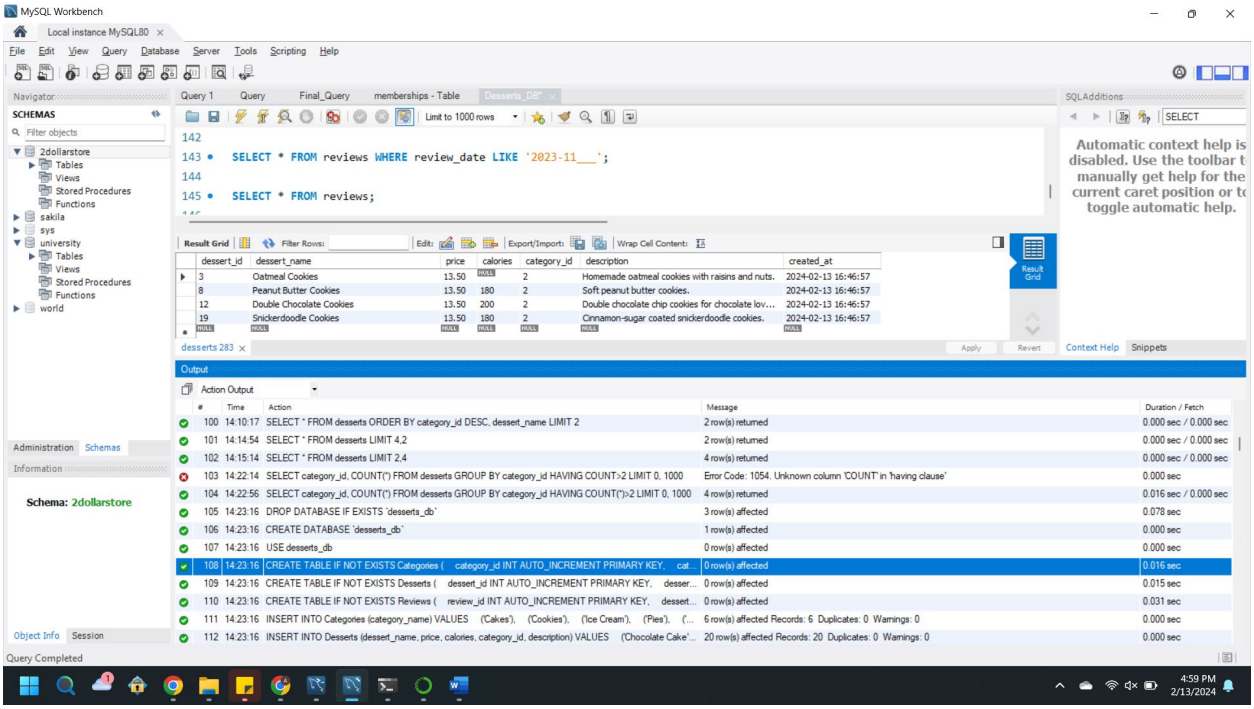
Measure the performance from the SQL workbench on different DDL and DML queries performed in this homework so far.

Answer 10:

By analyzing the time taken by each query, I see that the DML queries are faster than DDL queries.

DDL queries:

CREATE database, table, index and DROP table took more time than other queries. On average it took 0.020 seconds.



DML queries:

UPDATE query took 0.015 seconds, SELECT and INSERT query took 0 seconds.