Deliverable 3

1) Load the tables with sufficient test data

Menu Table

INSERT INTO `Menu` VALUES (1, 'Chicken Soup', 'Hot Liquid Soup with Tinge of Chicken and Spices', 7.05, 102),

- (2, 'Chicken Nuggets', 'Hot and Crispy Nuggets with some added spices', 5.6, 101),
- (3, 'Veggie Delight', 'A mix of boiled veggies with cheese and salad', 8.4, 104),
- (4, 'Vegetable Spring Roll', 'Roll consisting of mixed vegetables with crispy wonton wrapper', 8.7, 105),
- (5, 'Garden Salad', 'Fresh Romaine Lettuce with added carrots and grape tomatoes', 10.2, 103),
- (6, 'Chocolate Lava Cake', 'Lava Cake consisting of Hot Chocolate', 6.8, 106),
- (7, 'Chicken Pizza', 'Hot and Soft Pizza with olives and chicken', 10.05, 102),
- (8, 'French Fries', 'Hot and Crispy French Fries with Ranch', 3.6, 101),
- (9, 'Veg Sub', 'A mix of boiled veggies with salad dressing', 7.6, 104),
- (10, 'Beef Spring Roll', 'Roll consisting of beef with crispy wonton wrapper', 11.7, 105),
- (11, 'Romaine Salad', 'Fresh Romaine Lettuce with added cheese', 8.2, 103),
- (12, 'Chocolate Brownie', 'Brownie with dry fruits topping', 6.8, 106),

- (13, 'Chicken Burger', 'Burger consisting of Chicken and Cheese', 7.05, 102),
- (14, 'Steak Burger', 'Burger consisting of Steak and Sauce', 12.6, 101),
- (15, 'Chocolate Cookies', 'Choco Chip Cookies baked in low flame', 4.4, 104),
- (16, 'Orange Chicken', 'Chicken dipped in Orange Sauce', 6.7, 105),
- (17, 'SoftDrink', 'Drinks with Ice Cubes', 3.2, 103),
- (18, 'Flavoured Yoghurt', 'Yoghurt in different flavours', 4.8, 106);

Menu_Catalog

USE Campus_Eats_Fall2020;

INSERT INTO `Menu_Catalog` VALUES (1, 'Chicken Soup', 'Hot Liquid Soup with Tinge of Chicken and Spices', 7.05, 102),

- (2, 'Chicken Nuggets', 'Hot and Crispy Nuggets with some added spices', 5.6, 101),
- (3, 'Veggie Delight', 'A mix of boiled veggies with cheese and salad', 8.4, 104),
- (4, 'Vegetable Spring Roll', 'Roll consisting of mixed vegetables with crispy wonton wrapper', 8.7, 105),
- (5, 'Garden Salad', 'Fresh Romaine Lettuce with added carrots and grape tomatoes', 10.2, 103),
- (6, 'Chocolate Lava Cake', 'Lava Cake consisting of Hot Chocolate', 6.8, 106),
- (7, 'Chicken Pizza', 'Hot and Soft Pizza with olives and chicken', 10.05, 102),
- (8, 'French Fries', 'Hot and Crispy French Fries with Ranch', 3.6, 101),
- (9, 'Veg Sub', 'A mix of boiled veggies with salad dressing', 7.6, 104),

- (10, 'Beef Spring Roll', 'Roll consisting of beef with crispy wonton wrapper', 11.7, 105),
- (11, 'Romaine Salad', 'Fresh Romaine Lettuce with added cheese', 8.2, 103),
- (12, 'Chocolate Brownie', 'Brownie with dry fruits topping', 6.8, 106),
- (13, 'Chicken Burger', 'Burger consisting of Chicken and Cheese', 7.05, 102),
- (14, 'Steak Burger', 'Burger consisting of Steak and Sauce', 12.6, 101),
- (15, 'Chocolate Cookies', 'Choco Chip Cookies baked in low flame', 4.4, 104),
- (16, 'Orange Chicken', 'Chicken dipped in Orange Sauce', 6.7, 105),
- (17, 'SoftDrink', 'Drinks with Ice Cubes', 3.2, 103),
- (18, 'Flavoured Yoghurt', 'Yoghurt in different flavours', 4.8, 106);

Order_Rating

insert into `order_rating` values(1, 3, 3, 4, 'Food is ok'),

- (2, 3, 5, 6, Food is good'),
- (3, 3, 8, 9, 'Food is great'),
- (4, 3, 10, 8, 'Food is delicious'),
- (5, 5, 4, 6, 'Food is good'),
- (6, 5, 7, 10, 'Food is delicious'),
- (7, 5, 9, 3, 'Food is ok'),
- (8, 5, 1, 6, 'Food is great'),
- (9, 7, 5, 4, 'Food can be better'),
- (10, 7, 8, 7, 'Food is great'),

```
(11, 7, 6, 6, 'Food is good'),
```

(12, 7, 2, 9, 'Food delivered on time'),

(13, 9, 9, 10, 'Food is tasty and delivered on time'),

(14, 9, 7, 6, 'Food is good'),

(15, 9, 6, 9, 'Food is delicious'),

(16, 9, 3, 5, 'Food is ok');

Order_Status

insert into `order_status` values (1, 'Delivered'),(2, 'On the way'),(3, 'Preparing'),(4, 'Order placed');

Payment

insert into `payments` values (1, 2, 1, 20.63, 7.25),

(2, 4, 2, 16.85, 4.25),

(3, 5, 3, 13.89, 3.85),

(4, 7, 4, 10.54, 2.08), (5, 6, 5, 4.90, 1.87), (6, 10,6, 25.34, 6.45), (7, 15,7, 14.52, 9.01), (8, 19,8, 19.67, 7.05);

Restaurant

INSERT INTO `restaurant` VALUES (101,'9201 University City Blvd','Wendys','11am -10pm','https://www.wendys.com'),

(102,'8917 Johnson Alumni Way','SoVi','7am - 11pm','http://aux.charlotte.edu/dining/dining'),

(103,'901 University City Blvd','Bojangles','8am - 10pm','https://www.bojangles.com/'),

(104,'9025 University Rd, Charlotte','Subway','10am - 10pm','https://order.subway.com/'),

(105,'9025 University Rd, Charlotte','Panda Express','10am - 9pm','https://www.pandaexpress.com/'),

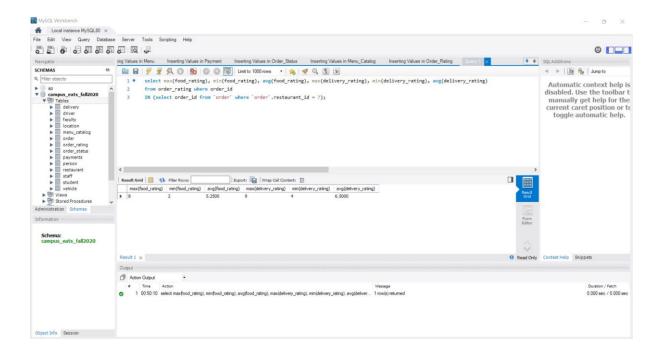
(106,'crowns: 8845 Craver Rd, Charlotte','Crowns','11am - 8pm','https://dineoncampus.com/UNCCharlotte');

- 2) Create queries according to those specified in Deliverable 3 in Blackboard:
- a) display the max, min and average ratings for each feature when given a restaurant ID for all orders for that restaurant

Script

select max(food_rating), min(food_rating), avg(food_rating), max(delivery_rating), min(delivery_rating), avg(delivery_rating) from order_rating where order_id

IN (select order_id from `order` where `order`.restaurant_id = 7);



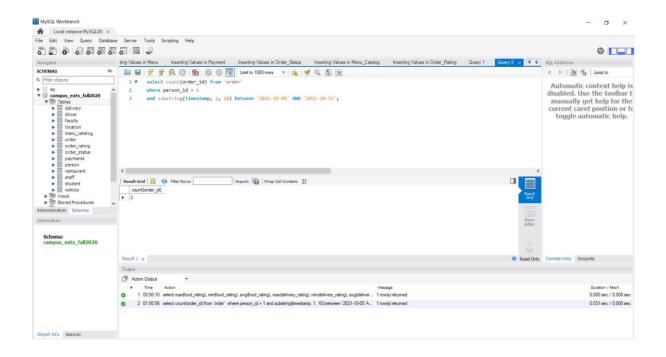
b) display a count of the orders made by a customer for a specified date range when given a customer id

Script

select count(order_id) from `order`

where $person_id = 1$

and substring(timestamp, 1, 10) between '2021-10-05' AND '2021-10-31';



c) display total price of the orders by each customer (distinct) for a specified date range

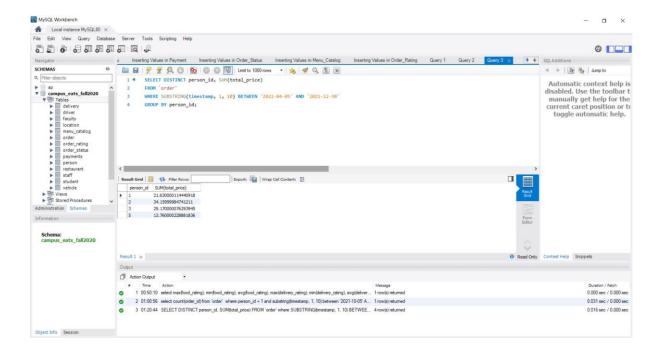
Script

SELECT DISTINCT person_id, SUM(total_price)

FROM `order`

WHERE SUBSTRING(timestamp, 1, 10) BETWEEN '2021-04-05' AND '2021-12-30'

GROUP BY person_id;



d) display a particular customer's rating for a restaurant

Script

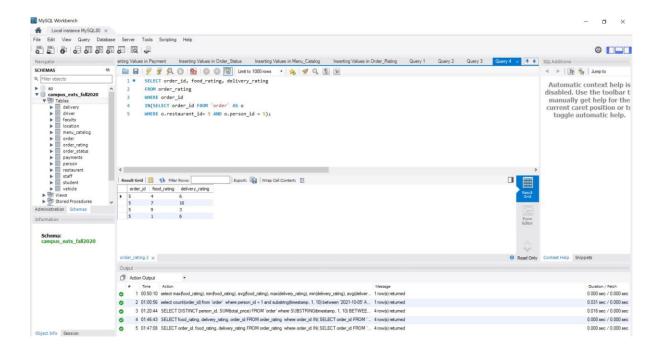
SELECT order_id, food_rating, delivery_rating

FROM order_rating

WHERE order_id

IN(SELECT order_id FROM `order` AS o

WHERE o.restaurant_id= 5 AND o.person_id = 5);



e) Have one of the above requirements represented in a View

View

USE `campus_eats_fall2020`;

CREATE OR REPLACE VIEW order_bill AS

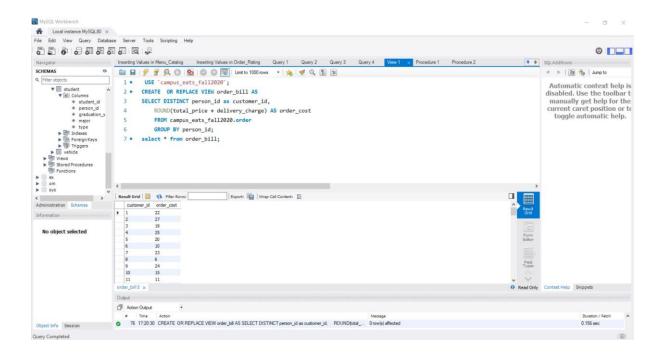
SELECT DISTINCT person_id as customer_id,

ROUND(total_price + delivery_charge) AS order_cost

FROM campus_eats_fall2020.order

GROUP BY person_id;

select * from order_bill;



f) Have one of the above requirements represented in a Stored Procedure

Procedure 1

USE `campus_eats_fall2020`;

DROP PROCEDURE IF EXISTS order_count;

DELIMITER //

CREATE PROCEDURE order_count(IN begin_year INT,IN final_year INT, OUT output_str varchar(100))

BEGIN

DECLARE number_of_orders Varchar(20);

SELECT count(*) into number_of_orders

FROM `order`

```
WHERE person_id in (
```

select person_id from student where graduation_year between begin_year and final_year

);

IF number_of_orders < 0 THEN

SET output_str = CONCAT("The number of orders are 0");

ELSE

SET output_str = CONCAT("The number of orders are ",
number_of_orders);

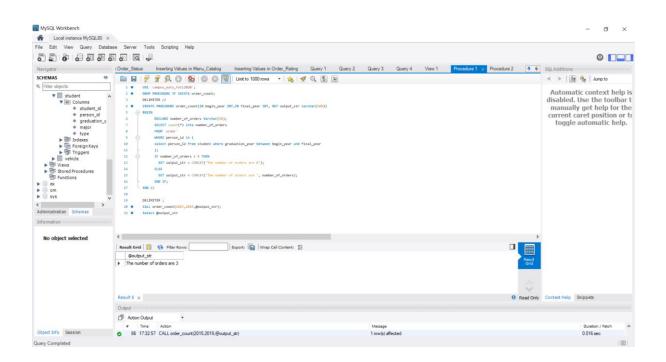
END IF:

END //

DELIMITER;

CALL order_count(2015,2019,@output_str);

Select @output_str



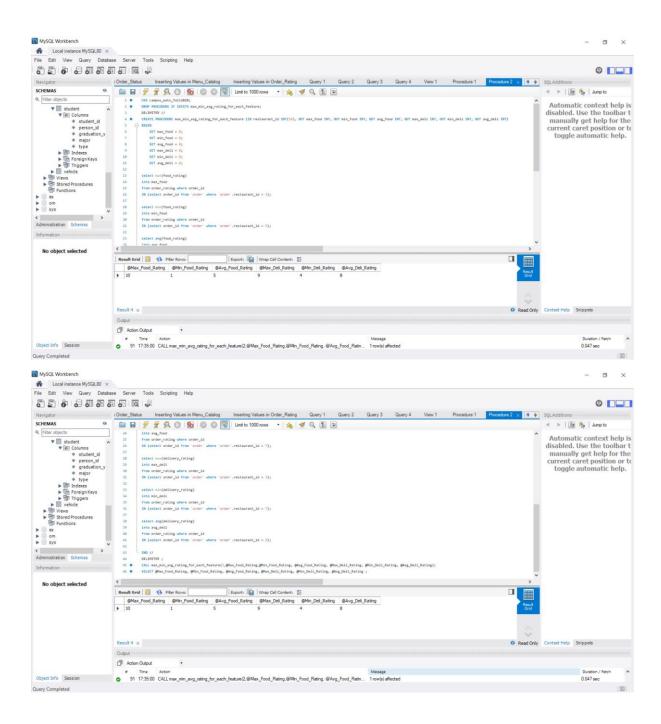
Procedure 2

```
USE campus_eats_fall2020;
DROP PROCEDURE IF EXISTS
max_min_avg_rating_for_each_feature;
DELIMITER //
CREATE PROCEDURE max_min_avg_rating_for_each_feature (IN
restaurant id INT(50), OUT max food INT, OUT min food INT,
OUT avg food INT, OUT max deli INT, OUT min deli INT, OUT
avg_deli INT)
BEGIN
  SET max food = 0;
  SET min food = 0;
  SET avg_food = 0;
  SET max_deli = 0;
  SET min deli = 0;
  SET avg_deli = 0;
select max(food_rating)
into max food
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 3);
select min(food_rating)
into min food
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 5);
```

```
select avg(food_rating)
into avg_food
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 7);
select max(delivery_rating)
into max_deli
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 3);
select min(delivery_rating)
into min deli
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 7);
select avg(delivery_rating)
into avg_deli
from order_rating where order_id
IN (select order_id from `order` where `order`.restaurant_id = 9);
END //
DELIMITER;
CALL
max_min_avg_rating_for_each_feature(2,@Max_Food_Rating,@Mi
```

n_Food_Rating, @Avg_Food_Rating, @Max_Deli_Rating, @Min_Deli_Rating, @Avg_Deli_Rating);

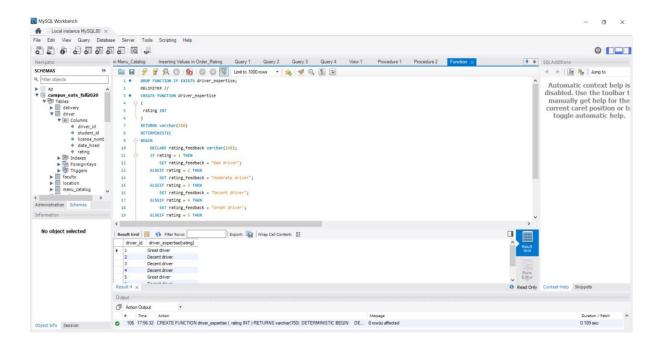
SELECT @Max_Food_Rating, @Min_Food_Rating, @Avg_Food_Rating, @Max_Deli_Rating, @Min_Deli_Rating, @Avg_Deli_Rating;

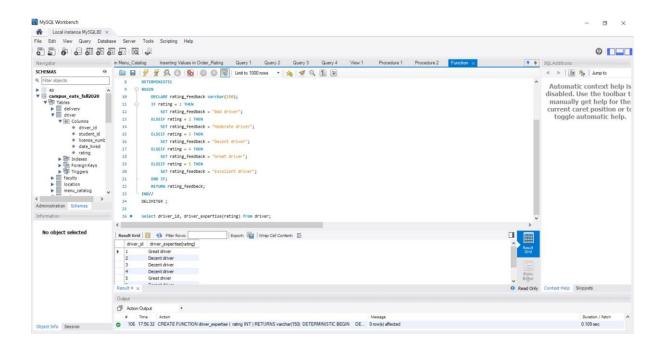


Function

```
DROP FUNCTION IF EXISTS driver_expertise;
DELIMITER //
CREATE FUNCTION driver_expertise
(
rating INT
RETURNS varchar(150)
DETERMINISTIC
BEGIN
  DECLARE rating_feedback varchar(150);
  IF rating = 1 THEN
         SET rating_feedback = "Bad driver";
    ELSEIF rating = 2 THEN
         SET rating_feedback = "Moderate driver";
    ELSEIF rating = 3 THEN
         SET rating_feedback = "Decent driver";
    ELSEIF rating = 4 THEN
         SET rating_feedback = "Great driver";
    ELSEIF rating = 5 THEN
         SET rating_feedback = "Excellent driver";
    END IF;
  RETURN rating_feedback;
END//
DELIMITER;
```

select driver_id, driver_expertise(rating) from driver;





Index

CREATE TABLE IF NOT EXISTS

`campus_eats_fall2020`.`order_rating` (`rating_id` INT NOT NULL,

`order_id` INT NOT NULL,

`food_rating` INT NULL,

`delivery_rating` INT NULL,

`comments` VARCHAR(200) NULL,

PRIMARY KEY (`rating_id`),

INDEX `order_id_indx` (`order_id` ASC) VISIBLE, CONSTRAINT
`order_id`

FOREIGN KEY (`order_id`)

REFERENCES `campus_eats_fall2020`.`order` (`order_id`))

