

40510222

Section 1

Section 1 – 40510222 Database Coursework

Question 6. (9points)

```
SELECT users.first_name, users.last_name, COUNT(orders.rider_id) AS
deliveries FROM rider JOIN users ON users.id=rider.user_id JOIN orders ON
orders.rider_id = rider.id GROUP BY users.first_name, users.last_name ORDER
BY COUNT(orders.rider_id) desc LIMIT 3;
```

Question 7. (9points)

```
SELECT restaurant.name AS restaurant, x.name AS item, x.price FROM food_item
x JOIN restaurant ON x.restaurant_id=restaurant.id WHERE 10 <= ALL(SELECT
price FROM food_item y WHERE x.restaurant_id=y.restaurant_id AND price>0);
```

Question 8. (9points)

```
SELECT first_name, last_name, SUM(CASE WHEN address.main = 1 THEN 1 ELSE 0
END) AS main, SUM(CASE WHEN address.main = 0 THEN 1 ELSE 0 END) AS other FROM
users JOIN orders ON orders.customer_id=users.id JOIN address ON
address.id=orders.delivery_address_id GROUP BY users.first_name,
users.last_name, users.id HAVING main >40 AND other>0 ORDER BY main,
users.last_name asc;
```

Question 11 and 15 are on the next page.

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Question 11. (12points)

```
SELECT x.id AS order_id,
SUM(food_item.price*order_item.quantity) AS 'items total',
(SELECT CASE
  WHEN SUM(food_item.price*order_item.quantity) >= 30 THEN 0
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 20 AND 30 THEN 1
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 10 AND 20 THEN 2
  WHEN SUM(food_item.price*order_item.quantity) < 10 THEN 3 ELSE 0 END AS
delivery FROM orders y JOIN order_item ON y.id=order_item.order_id JOIN
food_item ON order_item.food_item_id=food_item.id WHERE y.id=x.id GROUP BY
y.id) AS delivery,
SUM(food_item.price*order_item.quantity) + (SELECT CASE
  WHEN SUM(food_item.price*order_item.quantity) >= 30 THEN 0
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 20 AND 30 THEN 1
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 10 AND 20 THEN 2
  WHEN SUM(food_item.price*order_item.quantity) < 10 THEN 3 ELSE 0 END AS
delivery FROM orders y JOIN order_item ON y.id=order_item.order_id JOIN
food_item ON order_item.food_item_id=food_item.id WHERE y.id=x.id GROUP BY
y.id) AS total,
x.delivery_charge AS 'stored delivery charge',
x.total_price AS 'stored total' FROM orders x JOIN order_item ON
x.id=order_item.order_id JOIN food_item ON
order_item.food_item_id=food_item.id WHERE
(SELECT CASE
  WHEN SUM(food_item.price*order_item.quantity) >= 30 THEN 0
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 20 AND 30 THEN 1
  WHEN SUM(food_item.price*order_item.quantity) BETWEEN 10 AND 20 THEN 2
  WHEN SUM(food_item.price*order_item.quantity) < 10 THEN 3 ELSE 0 END AS
delivery FROM orders y JOIN order_item ON y.id=order_item.order_id JOIN
food_item ON order_item.food_item_id=food_item.id WHERE y.id=x.id GROUP BY
y.id) <> x.delivery_charge GROUP BY x.id, order_item.order_id,
x.delivery_charge, x.total_price;
```

Question 15. (12points)

```
SELECT ROUND(SUM(CASE WHEN TIMESTAMPDIFF(MINUTE, order_date,
actual_delivery_time)<40 THEN 1 ELSE 0 END) / SUM(CASE WHEN
TIMESTAMPDIFF(MINUTE, order_date, actual_delivery_time)>0 THEN 1 ELSE 0
END),2) AS P FROM orders WHERE DATE_FORMAT(order_date, "%H%i") BETWEEN 1830
AND 1930 AND DAYNAME(order_date) LIKE 'Friday';
```