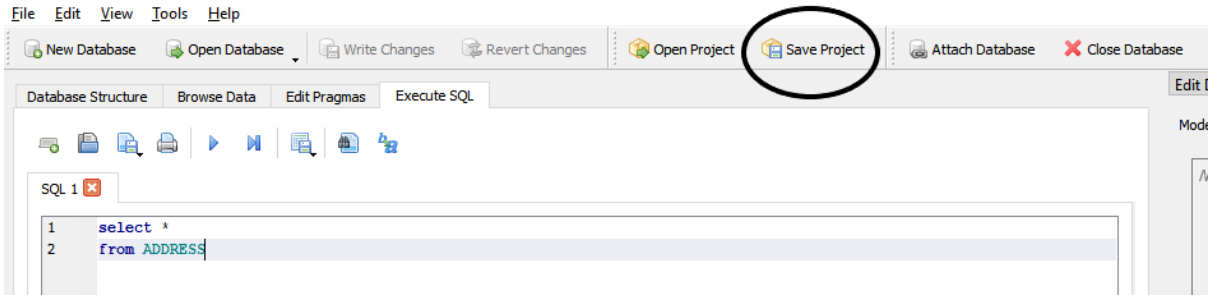
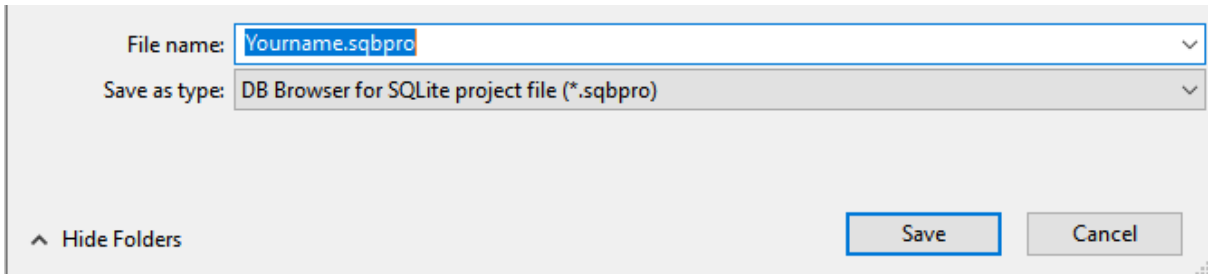
greatlearning
Learning for Life

How to save files

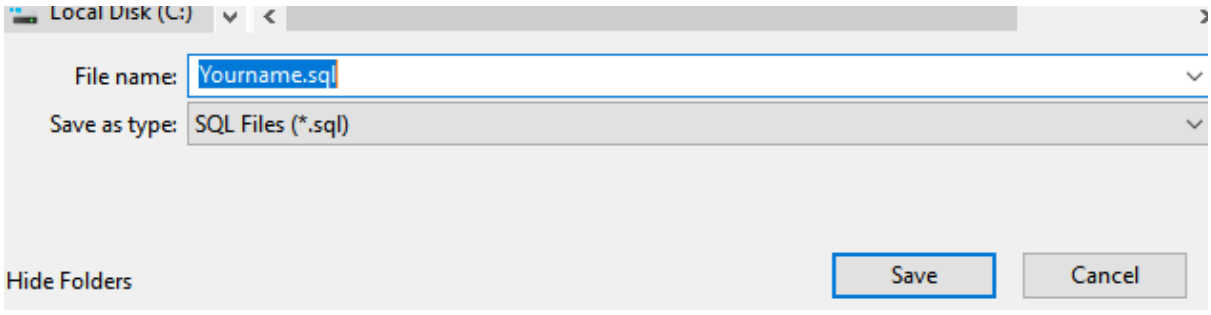
Part-1-SQLite(.sqbpro): After executing all the commands/answers, click on the **Save project tab** on the top and save the file name as **yourname.sqbpro** As shown below:





Part-2-MySQL(.SQL): After executing all the commands/answers, click on the file menu on the top left and save as **Yourname.sql.**

As shown below:



Order Management Schema Details

This document captures the scenario of simple order management functionality of an online retail store.

Typical purchase scenario: A **customer** places an **order** for N **products** specifying quantity for each line **item** of the order. Every product belongs to a **product class** (or category). All products ordered in one order, are shipped to customer's **address** (in India or outside) by a **shipper** in one shipment. Order can be paid using either Cash, Credit Card or Net Banking.

There can be customers who may not have placed any order. Few customers would have cancelled their orders (As a whole order, no cancellation of individual item allowed). Few orders may be 'In process' status. There can also be products that were never purchased.

Shippers use optimum sized **cartons** (boxes) to ship an order, based on the total volume of all products and their quantities. Dimensions of each product (L, W, H) is also stored in the database. To keep it simple, all products of an order are put in one single appropriately sized carton for shipping.

Project- (SQLite & MYSQL)

You are hired by a chain of online retail stores **"Reliant retail limited"**. They provided you with "**orders**" database and seek answers to the following queries as the results from these queries will help the company in making data driven decisions that will impact the overall growth of the online retail store.

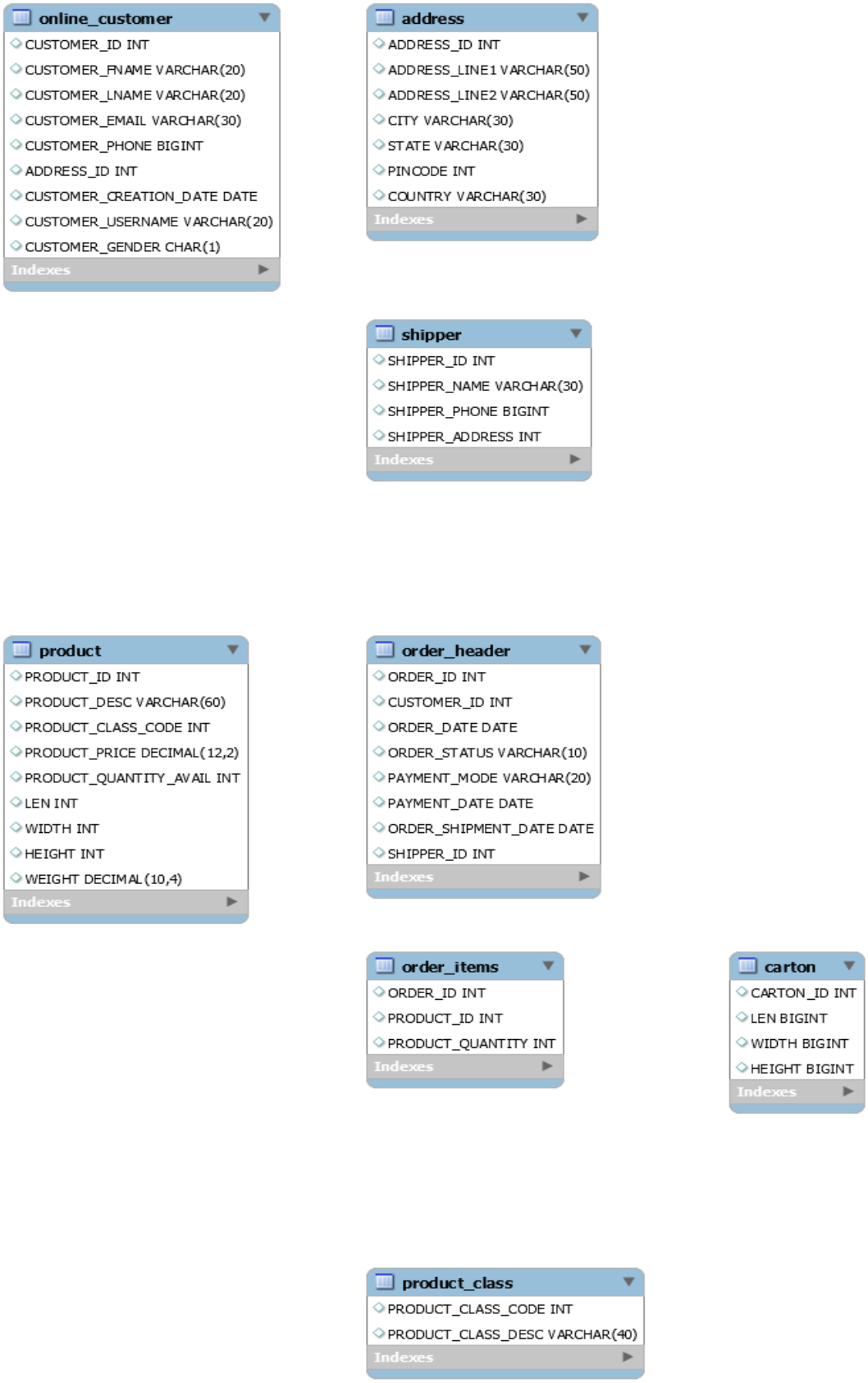
1st part- Q1-Q6 comes under SQLite and queries should be executed in DB Browser. (Database

- **Orders.db)**

2nd part- Q7-Q10 comes under MYSQL and the queries should be executed in MYSQL. (SQL Script -**orders.sql**)

All Questions carry 8 marks. Total Marks (8 x 10) = 80

ER Diagram



Part-1(SQLite)

1. Write a query to Display the product details (product_class_code, product_id, product_desc, product_price,) as per the following criteria and sort them in descending order of category:
    a. If the category is 2050, increase the price by 2000
    b. If the category is 2051, increase the price by 500
    c. If the category is 2052, increase the price by 600.

    Hint: Use case statement. no permanent change in table required.

    (60 ROWS) [NOTE: PRODUCT TABLE]

2. Write a query to display (product_class_desc, product_id, product_desc, product_quantity_avail) and Show inventory status of products as below as per their available quantity:

    a. For Electronics and Computer categories, if available quantity is <= 10, show 'Low stock', 11 <= qty <= 30, show 'In stock', >= 31, show 'Enough stock'

    b. For Stationery and Clothes categories, if qty <= 20, show 'Low stock', 21 <= qty <= 80, show 'In stock', >= 81, show 'Enough stock'

    c. Rest of the categories, if qty <= 15 – 'Low Stock', 16 <= qty <= 50 – 'In Stock', >= 51 – 'Enough stock'

    For all categories, if available quantity is 0, show 'Out of stock'.

    Hint: Use case statement.

    (60 ROWS) [NOTE: TABLES TO BE USED – product, product_class]

3. Write a query to Show the count of cities in all countries other than USA & MALAYSIA, with more than 1 city, in the descending order of CITIES. **(2 rows) [NOTE: ADDRESS TABLE, Do not use Distinct]**

4. Write a query to display the customer_id,customer full name ,city,pincode,and order details (order id,order date, product class desc, product desc, subtotal(product_quantity * product_price)) for orders shipped to cities whose pin codes do not have any 0s in them. Sort the output on customer name, order date and subtotal. **(52 ROWS)**
[NOTE: TABLE TO BE USED - online_customer, address, order_header, order_items, product, product_class]

5. Write a Query to display product id,product description,totalquantity(sum(product quantity) for an item which has been bought maximum no. of times along with product id 201.
(USE SUB-QUERY) (1 ROW) [NOTE: ORDER_ITEMS TABLE, PRODUCT TABLE]

6. Write a query to display the customer_id,customer name, email and order details (order id, product desc,product qty, subtotal(product_quantity * product_price)) for all customers even if they have not ordered any item.(225 ROWS)
[NOTE: TABLE TO BE USED - online_customer, order_header, order_items, product]

Part-2(MYSQL)

7. Write a query to display carton id, (len*width*height) as carton_vol and identify the optimum carton (carton with the least volume whose volume is greater than the total volume of all items (len * width * height * product_quantity)) for a given order whose order id is 10006, Assume all items of an order are packed into one single carton (box). **(1 ROW)**
[NOTE: CARTON TABLE]

8. Write a query to display details (customer id,customer fullname,order id,product quantity) of customers who bought more than ten (i.e. total order qty) products per shipped order.
(11 ROWS) [NOTE: TABLES TO BE USED - online_customer, order_header, order_items,]

9. Write a query to display the order_id, customer id and cutomer full name of customers along with (product_quantity) as total quantity of products shipped for order ids > 10060. (6 ROWS)

[NOTE: TABLES TO BE USED - online_customer, order_header, order_items]

10. Write a query to display product class description ,total quantity (sum(product_quantity),Total value (product_quantity * product price) and show which class of products have been shipped highest(Quantity) to countries outside India other than USA? Also show the total value of those items.

(1 ROWS)[NOTE:PRODUCT TABLE,ADDRESS TABLE,ONLINE_CUSTOMER TABLE,ORDER_HEADER TABLE,ORDER_ITEMS TABLE,PRODUCT_CLASS TABLE]