# **SQL FAQs-2**



* **On what databases I should work on the project and how to load them on the tool. How should I download files for**[**New Orders.DB,**](https://olympus.greatlearning.in/courses/8846/files/1481254/download?wrap=1)**&**[**new Orders.sql**](https://olympus.greatlearning.in/courses/8846/files/1481255/download?wrap=1)**. I couldn't find them?**

*Files have been provided to you in the Project problem statement section. You may just click on the file and download it and then use the commands.*

* **I am not able to load**[**New Orders.DB**](https://olympus.greatlearning.in/courses/8846/files/1481254/download?wrap=1)**in SQLite. Please help me I am not able to view the tables in it and work on queries?**

*To load or open database (.db) file, you may use .open FILENAME command.*

*The following statement opens the New.Orders.db database:*

*sqlite> .open c:\sqlite\db\New.Orders.db*

*Once you have opened a database file in SQLite, you may use the ".table" command to display the table and then work on your queries.*

* **concat() does not work in SQLite.... I tired a + '' + b....it does not work Any other alternatives to join names?**

*In SQLite, this should work : (FNAME || ' ' || LNAME) AS NAME*

***Question - 1***

* **There is no Category column in the product table. Instead of Category, It should be product\_class\_code Secondly It has not mentioned what we should suppose to do if the Category is different from mentioned category conditions ( What we should do if the category is 3000) or We should work on mentioned categories only. Please clarify?**

*Yes, you are right, by 'category' it means product\_class\_code. It's good to explore and put your observations in front.*

*Although, exploration is a part of this exercise where you work out the question and answer accordingly.*

*On your second question, you only need to answer what's being asked and leave the rest as it is.*

* **For Q1 which explicitly says "no permanent change in table required", does it imply that we have to add a temporary column (for the duration of the code) called "new price"?**

*No, it means that you are not supposed to UPDATE or DELETE the columns in the table nor CREATE new tables for your representation.*

*A new column name can be used as an alias for your manipulation in case if you are going to use a CASE statement.*

**Question - 2**

* **Problem (For Electronics and Computer categories, if available quantity is <= 10, show 'Low stock', 11 <= qty <= 30, show 'In stock', >= 31, show 'Enough stock'). Do we need to use two case statements? One for selecting the product (like electronics) and the other to use in this product segment for assigning the status of quantity?**

*You may use multiple case statements to show inventory status (Low stock, In stock, and Enough stock) that meets both the conditions i.e. on products as well as on quantity.*

* **In question 2 c, Please clarify the meaning of the rest of the categories, does it mean apart from electronics, computers, Stationery, and clothes?**

*Yes*

***Question - 3***

* **Slight confusion in Problem 3. (Write a query to show the count of cities in all countries other than the USA & MALAYSIA, with more than 1 city). Are we expected to show the count of cities or the total number of occurrences? For example- 'Bangalore' has a total occurrence of 7 and Hyderabad is mentioned 2 times in the table. Are we supposed to count the total occurrences of 'Bangalore' + 'Hyderabad' + other Indian countries (which will be 7+2+....)?? Or we just need to treat 7 occurrences of Bangalore as 1 city and 2 occurrences of Hyderabad as 1 (count, in this case, would be 1+1+...)??**

*If you look at the hint, it says 'Do not use distinct'. So you in your example, Bangalore will be counted as 7 and not 1.*

*Had you used 'distinct', it would have been 1.*

* ***Can you please advise if the answer should contain only 2 rows as mentioned in the question?***

*Yes if you group by specific country and check for the count of cities which are more than 1 with respect to each country. It will give you only 2 rows as mentioned.*

* **In the question given below, I assume that the count of cities needs to be in descending orders and not city names. Is my assumption right?**

*yes, you are right - it should be in descending order.*

***Question - 4***

* **In the HINT it's been given as 52 ROWS, but the moment I join the ORDER\_Header table - the number of rows increases no matter what kind of join I try. So is this hint absolutely correct?**

*Yes, you are right, the number of rows will increase but I believe you are missing out on other given conditions like: 'for orders shipped to cities whose pin codes do not have any 0s in them'.*

*So you map only those records where order status is 'Shipped' and pin codes do not have 0.*

* **Do we need to select pin codes with no 0s at all in each one of them and consider pin codes where all the 5 or 6 digits in them are numbers with no 0 in them at any position in the Pincode? Please suggest.**

*Here the expectation is that the PINCODE should not contain "0"*

* **In Question 4, can sorting be either ascending or descending?**

*you can order by ascending*

* **Hi, as the table to use are more we need to use inner join. But I am getting a different number of rows in output, not 52 rows. Could you please confirm the number of expected rows? Also, Order \_date in null value in the database.**

*Order\_date given in the database is such that -it has null values. So no don't worry about that.*

*Regarding the count mismatch - Yes, we need to use INNER JOIN not because the table used is more - it is because we only need matching rows from all the tables. If you are getting more rows than the expected one. Check for the specific condition.*

*In the question, if you see there is a mention - "...subtotal(product\_quantity \* product\_price)) for orders shipped to cities ...." meaning you need to consider the order\_status and check whether the orders are shipped.*

*Check the count after the inclusion of the above condition.*

* **In project question number 4, do we have to find the order details with pin code with not null values, or do we have to find the orders whose pin code doesn't have 0 in the pin code number?it is a bit confusing. please suggest.**

*You have to find the order details whose pin code doesn't have '0' in the pin code number.*

***Question - 5***

* **Just to reconfirm - Is it all right for us to answer the questions in both ways - using count and sum?**

*The sum is not going to change with respect to the product - i.e The total quantity will be the same within the product. But the number of times which it is going to be present and bought along with product\_Id: 201 that matters.*

* **Should the result of the SQL query for the above question, have only PRODUCT\_ID=201 ?**

*No it is not necessary to display the PRODUCT\_ID: 201. Could you kindly read the explanation mentioned below - Here our objective is to find out the maximum quantity [total quantity] along with the Product\_ID of the same - which is bought along with PRODUCT\_ID:201?*

* **For question 5, I have first identified all those orders that contain product ID 201. Then I am using them a group by function to identify the product-wise total quantity in each of these orders. Then I am identifying the product ID with the maximum quantity in those set of records. Is this correct thinking? Please advise.**

*Yes*

* **This question lacks clarity. What does "along with product id 201" mean?**

*You need to consider both 201 and where product\_id !=201*

* **I can see that the subquery can be done, but not without joining the tables. What is expected of the question? if it's the only subquery then it's not possible I think. Please advise.**

*Inside the where clause you will use a subquery. In the order, you can have multiple products. So, first, you pull out all the orders that have the product\_id 201 in them. From there, you will look for other product\_id that are brought along with product\_id 201 and you can get the total quantity( sum(product quantity) for each product\_id that was brought along with product\_id 201. You sort them and display the first row that was bought most number of the time.*

***Question - 6***

* ***Please help in understanding how to get all customers even if they have not ordered any item.***

*Yes, you are right - you can concatenate fname and lname and display it as a Customer Name.*

*This is not an INNER JOIN. Type of JOINS and use the one appropriately.*

*http://www.sql-join.com/sql-join-types (Links to an external site.)*

*Refer to the diagram and try to relate to the problem. You will be able to solve it definitely.*

*Please use 'left join'.*

*For all the customers from the customer table, you will have to generate the value of the total order(product\_quantity \* product\_price). You can use the order items table and product table to get this.*

***Question - 7***

**For product quantity, we require an order\_items table but our primary source here is the carton table, kindly provide some hint on how to approach this?**

*It states that you need to find out the minimum carton vol which will be greater than the total volume SUM(len \* width \* height \* product\_quantity) of particular order with order ID specified in the question.*

*You need to find out the minimum or the first carton\_id and its vol(if you are using order by) Consider the following example\**

*Say you have a carton table that has*

*ID   LEN   WIDTH  HEIGHT*

*10   20       30        40*

*20   30       60        80*

*order and products table are there with its entities*

*Order\_id   Product\_id  Legth  Width  height*

*1                  2            10       20       50*

*2                  1             3         2        1*

*Product\_ID    Product\_qty   Name*

*1                   2               pen*

*2                   3               kite*

*our objective is to find out the vol which say for order\_id :2 we need to find out optimum carton vol.*

*Optimum carton vol for ID 10 : 24000 (len\*width\*height)*

*Optimum carton vol for ID 20 :144000(len\*width\*height)*

*Now total volume for order\_id: 2 is sum(len\*width\*height\*qty) : (i.e)12 Now if you compare we need the minimum or optimum vol which is greater than 12 So your output would be*

*ID    Volume*

*10     24000*

*Basically, we have to build a query using base as carton and in subquery [utilize products and order\_items table here] you need to check for the specific condition and display the carton ID which has the optimal vol (minimum).*

* **I am able to find the carton id of the optimum carton in DB browser but when I run the same code in MySQL wokbench an error message "Error Code:1248. Every derived table must have its own alias" pops up. What I understand is that when the FROM clause is in the subquery we have to have an alias. Could anyone kindly particularize what the correct syntax should be?**

*select only the SUM(len \* width \* height \* product\_quantity) from the subquery and compare it against the carton\_vol. If you try to include additional columns, it will end up asking for alias names.*

* **question 7 is asking us to work with a single table - CARTON - but is asking us to calculate product quantity and so on. Can you please rephrase the question and elaborate on the same?**

*You need to join the product table as well to get the product quantity.*

*You need to write a sub query and in the subquery, you will take details from both Order\_items and Product tables. once you join both the tables, you can look for given order id. You can get the optimum carton value by first getting len \* width \* height \* product\_quantity for the given order id and then getting the carton\_id whose volume(len \* width \* height) is greater than total volume(len \* width \* height \* product\_quantity ).*

***Question - 8***

* **the Product\_Quantity column of ORDER\_ITEMS has only 5 records above 10 however the hint says that the output has 11 rows. Kindly provide some hint on how to approach this as well because the output of this query is returning only 5 records. Thank you in advance.**

*Here the catch is you need to consider all the tables provided and then group them per order. The quantity in the question they are referring to is the total quantity(sum of all) after mapping and do consider one main condition for order\_status whether it is shipped.*

*(i.e)*

*You are requested to display customer id, customer full name, order id, product quantity, and where the customers bought product such that the total order qty is more than 10.*

*You should join the tables mentioned and if you group it by order ids you should be able to achieve the results.*

*But here if you read the question carefully there is a specific ask, products per shipped order (meaning you also need to check for order\_status whether it is shipped ).*

***Question - 9***

* **kindly elaborate. I am getting 8 rows as output.**

*You have to select all the above details for order ids greater than 10060.*

*If you read the question - there is a point specifically mentioned "... total quantity of products shipped for order ids > 10060..."*

*Meaning you also need to consider order\_status as a condition and need to check whether the products are being shipped.*

***Question 10***

* **For me, there are 2 such products coming because max(sum(Product\_quantity)) is the same for both of them. So can I show 2 records or could you please explain in detail?**

*There should be only one record ideally speaking.*

*MAX(some\_value) should be one right unless 2 or more rows have the same values. we do not think that is the case here. One approach would be for you can make use of the ORDER BY and LIMIT clause here. If you are using max() you have to put it in a subquery. so that it is returning only one row.*

* **Hi, can please someone let me know if my approach to the following question is correct: First, we select PRODUCT\_CLASS\_DESC, the total quantity as sum(PRODUCT\_QUANTITY), and total value as sum(PRODUCT\_QUANTITY\*PRODUCT\_PRICE) and do the necessary joins by putting a condition on countries and order\_status all grouped by PRODUCT\_CLASS\_DESC ordered by the maximum value of total quantity. So the output comes as a single row having 3 columns, like product description, total quantity, and total value(This total value signifies the total value of all the items of the particular product class). "Also show the total value of those items." - What does it mean at the end of the question? Is it the same as the total value calculated above?**

*show SUM(product\_quantity \* product\_price) as the total\_value*

*also, show total quantity SUM(product\_quantity)*

* **Using INNER JOIN it is returning 1 null row. Can you pl tell me which join should I use?**

*Inner join should work fine. Please check once about the conditions country != India, country !=USA and order\_status = shipped.*

* **I am not clear with the requirement of the below question from the SQL Project.   
  As per my understanding, you require the one product class which was shipped the most outside India and the USA. Is that correct?**

*Yes, you are correct, and also the total quantity (sum(product\_quantity), and Total value (product\_quantity \* product price) of that product.*