

Please answer the following questions using Northwind(NW) data base.

How to attempt questions:

- Students need to write queries for the questions mentioned in the using NW database
- Read the questions carefully before writing the query in either pgAdmin or Northwind Playground (in the “Database installation and overview”S chapter of SQL)

How to submit the Assignment:

- Copy the SQL query code and paste it in the answer section in this file
- Once the assignment is done, submit the file over LMS

Invalid Submissions:

- Pasting pictures of the code as answer is NOT acceptable
- Uploading output data (CSVs) of the SQL queries is NOT acceptable

Write your answers(query) in the answer and submit it. To write the answer in the assignment, please follow the below example in yellow

Example

Questions: Extract all the columns of the orders table

Answer: SELECT * FROM ORDERS

Questions:

1. Using Orders table, write the query to count distinct customers who purchase anything from Northwind

Expected output: Single number denoting the distinct transacting customers

Answer: SELECT COUNT(DISTINCT customer_id) AS distinct_customers
FROM orders
WHERE customer_id IS NOT NULL;

2. Get the details of the orders made by VINET, TOMSP, HANAR, VICTE, SUPRD, CHOPS from the orders table.

Expected columns in the output – Order_id, order_date, customer_id, Ship_country and Employee_id

```

Answer:  SELECT
          order_id,
          order_date,
          customer_id,
          ship_country,
          employee_id,
          COUNT(DISTINCT(customer_id)) ORDER_DETAILS
        FROM orders
       WHERE customer_id IN ('VINET','TOMSP','HANR','VICTE','SUPRD','CHOPS')
      GROUP BY order_id
     ORDER BY 3 DESC,
            2 ASC,
            5 ASC

```

3. According to the customers table, list down the customer_ids which start from "L" and end at "S"

Expected columns in the output – Customer_id

```

Answer:  SELECT
          customer_id
        FROM customers
       WHERE customer_id LIKE 'L%S'

```

4. According to the customers table, list down the customer_ids of france which starts from “L”E

Expected columns in the output – Customer_id

```

Answer:  SELECT
          customer_id
        FROM customers
       WHERE customer_id LIKE 'L%'
          AND country = 'France'

```

5. The company is planning to give a 10% discount on products above 10 dollars price point(including). Get the list of the product_id which are going to be listed at discounted price

Expected columns in the output – Product_id

```
Answer:  SELECT
          product_id
        FROM products
        WHERE unit_price < 10
```

6. According to the products table, which category_ids have more than 500 units_in_stock?

Expected columns in the output – category_id, total units_in_stock

```
Answer:  SELECT
          category_id,
          SUM(units_in_stock) TOTAL_UNITS_IN_STOCK
        FROM products
        GROUP BY category_id
        HAVING SUM(units_in_stock) > 500
        ORDER BY 1
```

7. According to the products table, list the supplier_ids responsible for supplying exactly 5 products from the list.

Expected columns in the output – supplier id, total products supplied

```
Answer:  SELECT
          supplier_id,
          COUNT(*) AS total_products_supplied
        FROM products
        GROUP BY supplier_id
        HAVING COUNT(*) = 5;
```

8. Using the orders table, create a table where the count of orders placed would be mentioned against every customer_id.

Expected columns in the output – Customer_id, count of orders

```
Answer:  SELECT
          customer_id,
          COUNT(customer_id) Count_of_Orders
        FROM customers
```

GROUP BY customer_id

ORDER BY 1

9. Using the orders table, create a table where the count of orders placed would be mentioned against every customer_id but only for customers having at least 10 orders

Expected columns in the output – Customer_id, count of orders

Answer: **SELECT**

customer_id,

COUNT(order_id)

FROM orders

GROUP BY customer_id

HAVING COUNT(order_id) >= 10

ORDER BY customer_id

10. The Order_Details table is unique at the order_id and product_id levels. It shows the various products ordered for every order_id. Northwind is using bigger boxes for orders having 6 or more product_ids. Can you extract the list of order ids along with the count of products ordered?

Expected output: Order_id, count of products

Answer: **SELECT**

order_id,

COUNT(product_id) Count_of_Products

FROM order_details

GROUP BY order_id

HAVING COUNT(product_id) >= 6

ORDER BY 1