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-- Date: 24/9

-- Purpose: Lab 2 DBS311

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-- Question 1 – For each job title display the number of employees. Sort the result according to the number of employees.

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/*-- Q1 SOLUTION --*/

SELECT

  job_title,

  COUNT(*) AS "EMPLOYEES"

FROM

  employees

GROUP BY

  job_title

ORDER BY

  COUNT(*);
```

-- Question 2 – Display the highest, lowest, and average customer credit limits. Name these results high,

low, and average. Add a column that shows the difference between the highest and the

lowest credit limits named “High and Low Difference”. Round the average to 2 decimal

places.

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/*-- Q2 SOLUTION --*/

SELECT
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  MAX(credit_limit) AS "HIGH",
  MIN(credit_limit) AS "LOW",
  round(AVG(credit_limit) , 2) AS "AVERAGE",
  MAX(credit_limit) - MIN(credit_limit) AS "High Low Difference"
FROM
  customers;
   -- Question 3 –
/*Display the order id, the total number of products, and the total order amount for orders
with the total amount over $1,000,000. Sort the result based on total amount from the high
to low values.*/

/*-- Q3 SOLUTION --*/
SELECT
  order_id,
  SUM(quantity) AS "TOTAL_ITEMS",
  SUM(unit_price*quantity) AS "TOTAL_AMOUNT"
FROM
  order_items
GROUP BY
  order_id
ORDER BY
  SUM(unit_price*quantity) DESC;

   -- Question 4 –
   /*Display the warehouse id, warehouse name, and the total number of products for each
warehouse. Sort the result according to the warehouse ID.*/
/*-- Q4 SOLUTION --*/
SELECT
  warehouses.warehouse_id,
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  warehouses.warehouse_name,
  SUM(inventories.quantity)
FROM
  warehouses
  LEFT JOIN
    inventories
    ON inventories.warehouse_id = warehouses.warehouse_id
GROUP BY
  warehouses.warehouse_id,
  warehouses.warehouse_name
ORDER BY
  warehouses.warehouse_ID;
   -- Question 5 –
  /* For each customer display customer number, customer full name, and the total number of
orders issued by the customer.
▪ If the customer does not have any orders, the result shows 0.
▪ Display only customers whose customer name starts with ‘O’ and contains ‘e’.
▪ Include also customers whose customer name ends with ‘t’.
▪ Show the customers with highest number of orders first.*/

/*-- Q5 SOLUTION --*/
SELECT
  customers.customer_id,
  customers.name,
  COUNT(orders.customer_id) AS "total number OF orders"
FROM
  customers
  LEFT JOIN
    orders
```

```
   ON customers.customer_id = orders.customer_id
WHERE
  customers.name LIKE '%t'
  OR
  (
    customers.name LIKE 'O%'
    AND customers.name LIKE '%e%'
  )
GROUP BY
  customers.customer_id,
  customers.name
ORDER BY
  "total number OF orders" DESC
   -- Question 6 –
   /*Write a SQL query to show the total and the average sale amount for each category. Round
the average to 2 decimal places.*/
  /*-- Q6 SOLUTION --*/
  SELECT
    products.category_id,
    SUM(ORDER_ITEMS.unit_price*ORDER_ITEMS.quantity) AS "TOTAL_AMOUNT",
    round(AVG( ORDER_ITEMS.unit_price*ORDER_ITEMS.quantity) , 2) AS "AVERRAGE_AMOUNT"
  FROM
    products
    LEFT JOIN
      ORDER_ITEMS
      ON ORDER_ITEMS.product_id = products.product_id
  GROUP BY
    products.category_id
```