بِسۡــــمِٱللَّهِٱلرَّحۡمَٰنِٱلرَّحِيــمِ

Database Management Systems

Mini project

Part-I

Dr. Mahmoud Hasan Saheb

Aram Al-Shahateet (221020)

شعبة (٢)

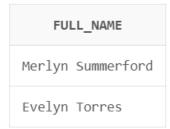**Lames klawi (221049)**

شعبة (١)

1-   List the customers' names and emails for customers with ID less than 7.

```
1 v  SELECT FULL_NAME, EMAIL_ADDRESS
2    FROM CO.CUSTOMERS
3    WHERE CUSTOMER_ID < 7;
4
```

FULL_NAME	EMAIL_ADDRESS
Tammy Bryant	tammy.bryant@internalmail
Roy White	roy.white@internalmail
Gary Jenkins	gary.jenkins@internalmail
Victor Morris	victor.morris@internalmail
Beverly Hughes	beverly.hughes@internalmail
Evelyn Torres	evelyn.torres@internalmail

2-   List the customers' names for customers whose names contain 'ly' as the 4th and 5th character; capital or small.

```
1 v  SELECT FULL_NAME
2    FROM CO.CUSTOMERS
3    WHERE FULL_NAME LIKE '___ly%';
```

FULL_NAME
Merlyn Summerford
Evelyn Torres

3- List the customer's name and the number of orders for each customer.

```sql
SELECT C.FULL_NAME, COUNT(O.ORDER_ID) AS NUMBER_OF_ORDERS
FROM CO.CUSTOMERS C
LEFT JOIN CO.ORDERS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
GROUP BY C.FULL_NAME;
```

FULL_NAME	NUMBER_OF_ORDERS
Tyler Curlee	3
Broderick Faur	6
Carol Alexander	6
Lillia Talbott	4
Andria Myles	4
Carl Lee	5
Luis Pothoven	5
Cathey Salen	7
Edmund Hikel	5
Dagny Bumatay	7
Dinah Paredes	1

Santiago Vautus	4
Daniella Almonte	5
Lai Kurtich	4
Li Robleto	6
Monte Calloway	7
Jeffrey Coleman	6
Beverly Hughes	3
Norris Michener	2
Nelson Koschnitzki	8
Jacklyn Clippard	4
Alvin Gagner	7
Susan Jenkins	4

Lucila Heck	2
Lonnie Colby	6
Stephanie Jones	6
Raymond Bailey	4
Boyd Reardon	5
Marvis Chou	1
Haywood Burd	4
Elden Arancibia	7
Cheryl Phillips	6
Gerald Evans	4
Adam Miller	7
Reinaldo Feltner	5

Ambrose Hiday	3
Tim Harmon	4
Ralph Foster	8
Finian Park	3
Tressa Coppens	4
Rhoda Hasfjord	3
Rob Kempt	4
Meg Vetterkind	3
Nelson Golz	8
Nancy Hall	2
Evelyn Torres	6
Carter Sacarello	4

Pete Chevis	5
Adeline Iannotti	4
Kristina Livshits	11

4- List the order status categories and the number of orders in each status in ascending order.

```sql
SELECT ORDER_STATUS, COUNT(ORDER_ID) AS NUMBER_OF_ORDERS
FROM CO.ORDERS
GROUP BY ORDER_STATUS
ORDER BY NUMBER_OF_ORDERS ASC;
```

ORDER_STATUS	NUMBER_OF_ORDERS
REFUNDED	23
CANCELLED	35
COMPLETE	1892

5-   How many orders and the total sales of the product 'Women's Coat'.

```sql
1   SELECT COUNT(OI.ORDER_ID) AS NUMBER_OF_ORDERS,
2          SUM(OI.UNIT_PRICE * OI.QUANTITY) AS TOTAL_SALES
3   FROM CO.ORDER_ITEMS OI
4   JOIN CO.PRODUCTS P ON OI.PRODUCT_ID = P.PRODUCT_ID
5   WHERE P.PRODUCT_NAME LIKE '%Women''s Coat%';
```

NUMBER_OF_ORDERS	TOTAL_SALES
89	11088.24

6-   List the customers' names with no orders till now.

```sql
1   SELECT C.FULL_NAME
2   FROM CO.CUSTOMERS C
3   LEFT JOIN CO.ORDERS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
4   WHERE O.ORDER_ID IS NULL;
```

no data found

7-   List the names of ==customers' names== for all customers having more than one order on the same day.

```sql
1   SELECT C.FULL_NAME
2   FROM CO.CUSTOMERS C
3   JOIN CO.ORDERS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
4   GROUP BY C.FULL_NAME, O.ORDER_DATETIME
5   HAVING COUNT(O.ORDER_ID) > 1;
```

no data found

8-   List the items' details including the total price for order number 678.

```
1 v  SELECT P.PRODUCT_NAME, OI.QUANTITY, OI.UNIT_PRICE,
2           (OI.QUANTITY * OI.UNIT_PRICE) AS TOTAL_PRICE
3    FROM CO.ORDER_ITEMS OI
4    JOIN CO.PRODUCTS P ON OI.PRODUCT_ID = P.PRODUCT_ID
5    WHERE OI.ORDER_ID = 678;
```

PRODUCT_NAME	QUANTITY	UNIT_PRICE	TOTAL_PRICE
Boy's Coat (Blue)	4	39.91	159.64
Girl's Shorts (Red)	3	43.71	131.13
Girl's Dress (Red)	2	7.18	14.36

9-   List the top 3 orders according to the order total cost.

```
1 v  SELECT O.ORDER_ID, O.CUSTOMER_ID, SUM(OI.QUANTITY * OI.UNIT_PRICE) AS TOTAL_COST
2    FROM CO.ORDERS O
3    JOIN CO.ORDER_ITEMS OI ON O.ORDER_ID = OI.ORDER_ID
4    GROUP BY O.ORDER_ID, O.CUSTOMER_ID
5    ORDER BY TOTAL_COST DESC
6    FETCH FIRST 3 ROWS ONLY;
```

ORDER_ID	CUSTOMER_ID	TOTAL_COST
918	118	529.4
1509	166	517.69
927	146	483.65

10- List the customers' names with more orders than the average of the order for one customer.

```sql
1  SELECT C.FULL_NAME
2  FROM CO.CUSTOMERS C
3  JOIN CO.ORDERS O ON C.CUSTOMER_ID = O.CUSTOMER_ID
4  GROUP BY C.FULL_NAME
5  HAVING COUNT(O.ORDER_ID) > (
6      SELECT AVG(ORDER_COUNT)
7      FROM (
8          SELECT CUSTOMER_ID, COUNT(ORDER_ID) AS ORDER_COUNT
9          FROM CO.ORDERS
10         GROUP BY CUSTOMER_ID
11     ));
12
```

FULL_NAME	Adam Miller	Florance Bateman	Gary Jenkins
Alvin Gagner	Carl Lee	Collene Guderjahn	Evelyn Torres
Li Robleto	Ralph Foster	Freddie Kirkhart	Norma Robinson
Edmund Hikel	Carol Alexander	Nanci Bunt	Tina Simmons
Dagny Bumatay	Daniella Almonte	Broderick Dourado	Kaija Crawford
Elden Arancibia	Luis Pothoven	Jewel Ginnery	Domingo Morano
Broderick Faur	Reinaldo Feltner	Vickie James	Milo Manoni
Lonnie Colby	Boyd Rearden	Tiffany Pena	Carlotta Achenbach
Monte Calloway	Nelson Koschnitzki	Paulette Byrd	Ayana Barkhurst
Jeffrey Coleman	Cathey Salen	Felix Fox	Sandy Heffren
Cheryl Phillips	Nelson Golz	Zulma Olds	Pete Chevis
Stephanie Jones	Carol Barnes	Lorilee Bautista	Kristina Livshits
	Van Seaforth	Irene Moore	Jewel Pedroncelli