Modise LE (HLONI KHOLWA) Exercise:7

Excercise : Union & Union ALL

Questions

1) /// write from both table which I use UNION///

```
SELECT customer_name,
FROM online_sales
UNION
SELECT customer_name
FROM store_sale;
```

customer_name
Alice
Brian
Carol
Daniel
Emma
Fiona
Geoge
Henry

2) ///write all equery (include duplicates). I used UNION ALL ///.

```
SELECT customer_name
FROM online_sales
UNION ALL
SELECT customer_name
FROM store_sales;
```

customer_name
Alice
Brian
carol
Daniel
Emma
Fiona

Brian

George

Alice

Henry

3) UNION vs UNION ALL : compare

Union: combines the results from both equries and removes duplicates, resulting in fewer rows when duplicates exist across the tables.

UNION ALL : combines the results but keeps all duplicates, resulting in more rows

4)
```
--- ALL Sale Date (with Duplicates).
---- show all sale dates from both table using UNION ALL.
SELECT sale_data
FROM online_sales
UNION ALL
SELECT sale_date
FROM store_sales;
```

sale_date
2025-01-12
2025-02-05
2025-03-10
2025-04-15
2025-05-02
2025-01-20
2025-02-08
2025-03-25
2025-04-18
2025-05-05

5) ---- Unique sale Dates.
--- Show unique sales date from both tables using UNION.

```
SELECT sale_date,
FROM online_sales
UNION
SELECT sale_date
FROM store_sales;
```

Sale_date
2025-01-12
2025-02-05
2025-03-10
2025-04-15
2025-05-02
2025-01-20
2025-02-08
2025-03-25
2025-04-18
2025-05-05

---- Note: All dates are unique, identical to UNION ALL with 10 rows.)

6) ---------------
--- High-value sales
---- unique customer names who made a sale above 280,

```
SELECT customer_name,
FROM online-sales
  WHERE amount>280
SELECT customer_name
FROM store-sales
  WHERE amount>280;
```

customer_name
Carol
George
Henry

7) ------ Combine sales data.

..... combine all records (columns: customer_name, amount, sale_date) from both tables using UNION ALL.

```
SELECT customer_name, amount, sale_date
FROM   online_sales
UNION ALL
SELECT customer_name, amount, sale_date
FROM   store_sales;
```

customer_name	amount	sales_date
Alice	150	2025-01-12
Brian	250	2025-02-05
Carol	300	2025-03-10
Daniel	220	2025-04-15
Emma	180	2025-05-02
Fiona	200	2025-01-20
Brian	250	2025-02-08
George	310	2025-03-25
Alice	150	2025-04-18
Henry	270	2025-05-05

8) ----- combine both table: include an extra column named source that Shows 'online' for-onlinee -salos and store' for store-sales.

```
SELECT customer_name, amount, sale_date, 'online' As source
FROM   online_Sales
Union ALL
SELECT customer_name, amount, sale_date, 'store' As source
FROM   store_sales;
```

customer_name	amount	sale_date
Alice	150	2025-01-12
Brian	250	2025-02-05
Carol	300	2025-03-10
Daniel	220	2025-04-15
Emma	180	2025-05-02
Fiona	220	2025-01-20
Brian	250	2025-02-08
George	310	2025-03-25
Alice	150	2025-04-18
Henry	270	2025-05-05

8) ------ combine both tables, list customers who appear more than once.

```
SELECT customer_name, amount, sale_date, 'online' As source
FROm online_sales
UNION ALL
SELECT customer_name,amount,sale_date,'store' As source
FRom store_sales;
```

customer_name	amount	sale_date	source
Alice	150	2025-01-12	online
Brian	250	2025-02-05	online
Carol	300	2025-03-10	Online
Daniel	220	2025-04-15	online
Emma	180	2025-05-02	online
Fiona	200	2025-01-20	Store
Brian	250	2025-02-08	store
George	310	2025-03-25	store
Alice	150	2025-04-18	store
Henry	270	2025-05-05	Store

9) ------ find and list customers who appear more than once across both tables. UNION ALL.

```
SELECT customer_name
FROM (
        SELECT customer_name FROM online_sales
        UNION ALL
        SELECT customer_name FROM store_sales
    ) AS combined
GROUP BY customer_name
HAVING COUNT (*) > 1;
```

customer_name
Alice
Brian

10) ------ combine all sales amounts from both tables and calculate the total amount of all sales.

```
SELECT SUM (amount) AS total_amount
FROM (
        SELECT amount FROM online_sales
        UNION ALL
        SELECT amount FROM store_sales
    ) AS combined;
```

total_amount
2280