~~15 October~~

SQL (union and union All)

1
```
SELECT Customer_name
FROM online_Sales
UNiON
SELECT customer_name
FROM Store_Sales
```

Customer_name
Alice
Brian
Carol
Daniel
EMMA
Fiona
George
Henry

2
```
SELECT Customer_name
FROM on line_Sales
Union All
SELECT customer_name
FROM Store_Sales
```

Customer-name
Alice
Brian
Carol
Daniel
Emma
Fiona
Brian
George
Alice
Henry

```
3) SELECT Sale_date
   FROM Online Sales
   Union
   SELECT Sales_date
   FROM Store_Sales
```

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

```
4  SELECT ~~Sales~~Sale-date
   FROM Online-Sales
   Union All
   SELECT Sales_date
   FROM Store_sales
```

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

```
5) SELECT Customer_name, amount
   FROM online_sales
   WHERE amount > 250
   Union
   SELECT Customer_name, amount
   FROM Store_Sales
   WHERE amount > 250
```

Customer-name	amount
Carol	300
George	310
Henry	270

6 ~~Last~~ SELECT customer-name, amount, Sale-date
FROM Online-Sales
~~SELECT~~ Union All
SELECT Customer-name, amount, sales-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

7 SELECT customer_name, amount, Sales_date,
'Online' AS Sources
FROM online_Sales
Union All
SELECT customer_name, amount, sale_date,
'store' AS Source
FROM Store_sales

8 SELECT customer_name,
count(*) AS occurences
FROM online_Sales

```
SELECT   Customer-name
         Count (*) AS Occarences
FROM  (  SELECT   Customer-name
         FROM   ~~onlineSal~~ online-Sales
         union ~~All~~
        SELECT  Customer~~e~~ name
        FROM   Store_Sales
       )  AS   all_Customers
      Group By  Customer_name
  Having  count (*) >1;
```

7

Customer-name	amount	Sales-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

8

Customer-name	Occarences
Alice	2
Brian	2

```
9   SELECT Sum(amount) AS total amount
    FROM (
            SELECT amount ~~FA~~
            FROM online_sales
            union all
            SELECT ~~Ge~~ amount
            FROM Store_Sales
          ) AS combine_Sales
```

total - amount
1400

Research Assignment

1 The main types of Databases are relational databases and non-relational databases

2 An RDBMS is a Software System used to create, manage and administer relational databases

3 A Primary key is a column in a table that uniquely Identifies each row in that table ~~as opposed~~ ~~a~~ whereas a foreign key is a column in one table that refers to ~~an~~ a primary key in another table

4 Database normalization is the Systematic process of Structuring a relational database to minimize data redundancy and undesirable anomalies