

SQL exercise: Union and Union All

1 Unique Customer Names

Select customer_name

From online_sales

Union

Select customer_name

From store_sales;

Customer_name
Alice
Brian
Carol
Daniel
Emma
Fiona
George
Henry

2 All customers

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 Unique sale dates

Select ~~customer_sales~~ Sale_date

From online_sales

Union

Select Sale_date

from store_sales

Order By Sale_date ASC;

Sale_date

2023-01-12

2023-01-20

2023-02-05

2023-02-08

2023-03-10

2023-03-23

2023-04-15

2023-04-18

2023-05-02

2023-05-05

4 All sales date

Select Sale_date

From online_sales

Union All

Select Sale_date

From store_sales;

Sale_date

2023-01-12

2023-02-05

2023-03-10

2023-04-15

2023-05-02

2023-01-20

2023-02-08

2023-03-23

2023-04-18

2023-05-05

5 High-value customers

Select customer_name, amount

FROM online_sales

Where amount > 250

Union

Select customer_name, amount

FROM store_sales

Where amount > 250;

Customer_name

Carol

Amount

300

George

310

Henry

270

6. Combine all sales data

Select * customer_name, amount, sale_date
 From online_sales
 Union All
 Select * customer_name, amount, sale_date
 From store_sales;

Customer-name	amount	sale_date
Alice	150	2025-01-12
Brian	250	2025-02-01
Carol	300	2025-03-10
Daniel	220	2025-04-05
Emma	180	2025-05-02
Fiona	200	2025-06-28
Brian	250	2025-07-18
George	310	2025-08-25
Alice	150	2025-09-18
Henry	270	2025-10-05

7. Add Sales Source label

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	2025-02-01	Online
Carol	300	2025-03-10	Online
Daniel	220	2025-04-05	Online
Emma	180	2025-05-02	Online
Fiona	200	2025-06-28	Online
Brian	250	2025-07-18	Store
George	310	2025-08-25	Store
Alice	150	2025-09-18	Store
Henry	270	2025-10-05	Store

8. Customers appearing in both tables

Select customer_name, Count(customer_name) AS occurrences
 From online_sales
 Union All
 Select customer_name, Count(customer_name) AS occurrences
 From store_sales
 Group By customer_name
 Having occurrences > 1;

Customer-name	Occurrence
Alice	2
Brian	2

Need guidance on Q9 and Bonus Q