

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 ~~online-sales~~ sale_date
 From online-sales
 Union
 Select sale_date
 From store-sales
 Order By sale_date ASC;

Sale_date

2025-01-12

2025-01-20

2025-02-05

2025-02-08

2025-03-10

2025-03-25

2025-04-15

2025-04-18

2025-05-02

2025-05-05

4. All sales date

Select sale_date
 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. 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

Amount

Carol

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

3 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		Online
Brian	250		Online
Carol	300		Online
Daniel	220		Online
Emma	180		Online
Fiona	200		Online
Brian	250		Store
George	310		Store
Alice	150		Store
Henry	270		Store

8 Customers appearing in both tables

Select Distinct customer_name, (Count(Distinct customer_name)) AS occurrences
 FROM online_sales

GROUP BY Union All
 Select Distinct customer_name, (Count(Distinct 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