

Exercise 7: SQL Fundamental (UNION & 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 online-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 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 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 SELECT DISTINCT customer-name,
amount

FROM online-sales
UNION ALL

SELECT customer-name,
amount

FROM store-sales

WHERE amount > 250;

Customer-name	amount
Carol	300
George	310
Henry	270

⑥ SELECT customer-name,
amount,
sale-date

FROM online-sales
UNION ALL

SELECT customer-name,
amount,
sale-date

FROM online-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	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,
 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	2025-03-15	Store
Alice	150	2025-04-18	Store
Henry	270	2025-05-05	Store

⑧ SELECT customer-name,
 COUNT(*) AS occurrences
 FROM online-sales
 UNION ALL
 SELECT customer-name,
 FROM store-sales
 GROUP BY customer-name
 HAVING COUNT(*) > 1

Customer-name	Occurrences
Alice	2
Brian	2

⑨ SELECT SUM(amount) AS total amount
 FROM
 (SELECT customer-name,
 FROM online-sales
 UNION ALL
 SELECT customer-name,
 FROM store-sales) AS combined;

Total Amount
2280

Bonus

```
SELECT customer-name  
      SUM(Amount) AS total-spent  
FROM  
(SELECT customer-name,  
      amount  
  FROM online-sales  
 UNION ALL  
  SELECT customer-name,  
      amount  
  FROM store-sales) AS combined-sales  
GROUP BY customer-name  
ORDER BY customer-name;
```

Customer-name	total-spent
Alice	350
Brian	520
Carol	350
Daniel	220
Emma	180
Fiona	280
George	310
Henry	270