

Exercise 3: SQL case statements

① SELECT product-name,
price,
CASE
WHEN price > 100 THEN 'Expensive'
WHEN price BETWEEN 100 AND 1000 THEN 'Mid-range'
ELSE 'Budget'
END AS price-category
FROM products;

Product-name	Price	Price-category
Laptop	1200.00	Expensive
Phone	800.00	Mid-range
Keyboard	45.00	Budget
Monitor	300.00	Mid-range
Mouse	25.00	Budget

② SELECT customer-name,
amount,
CASE
WHEN amount > 1000 THEN 'High value'
WHEN amount BETWEEN 500 AND 999.99 THEN 'Medium value'
ELSE 'Low value'
END AS order-value-category
FROM orders;

Customer-name	Amount	Order-value Category
Alice	150.00	Low-value
Bob	560.00	Medium-value
Charlie	999.99	Medium-value
Diana	45.50	Low value
Ethan	1200.00	High value

③ SELECT emp-name,
department,
salary,

CASE

WHEN department = 'IT' AND salary > 80000 THEN 'Senior IT'

WHEN department = 'HR' AND salary > 55000 THEN 'Experienced HR'
ELSE 'Staff'

END AS position-level

FROM employees,

emp-name	Department	Salary	Position-level
John	IT	85000	Senior IT
Sara	HR	60000	Experienced HR
Mark	IT	75000	Staff
Lucy	Finance	95000	Staff
Tom	HR	55000	Staff

④ SELECT student-name,
score,

CASE

WHEN score > 90 THEN 'A'

WHEN score BETWEEN 80 AND 89 THEN 'B'

WHEN score BETWEEN 70 AND 79 THEN 'C'

WHEN score BETWEEN 60 AND 69 THEN 'D'

ELSE 'F'

END AS grade

FROM Students,

Student-name	Score	grade
Anna	92	A
Ben	76	C
Cara	59	F
David	83	B
Ella	68	D

⑥ SELECT delivery_id,
 delivery_time_minutes,

CASE

WHEN delivery_time_minutes ≤ 30 THEN 'FAST'

WHEN delivery_time_minutes BETWEEN 31 AND 60 THEN 'ON TIME'

ELSE 'Late'

END AS performance

FROM deliveries,

delivery_id	delivery_time_minutes	Performance
1	45	On time
2	80	Late
3	30	Fast
4	65	Late
5	100	Late

⑥ SELECT issue_type,
 priority,

CASE

WHEN priority = 3 THEN 'High'

WHEN priority = 2 THEN 'Medium'

ELSE 'Low' OR WHEN priority = 1 THEN 'Low'

END AS priority_level

From Tickets,

issue-type	Priority	Priority level
Login issue	1	Low
Server down	3	High
Slow system	2	Medium
Email error	2	Medium
Password reset	1	Low

⑦ SELECT student-id,

CASE

WHEN attendance percentage $\geq 90\%$ THEN 'Excellent'

WHEN attendance percentage between 75 AND 89% THEN 'Good'

ELSE 'Needs improvement'

END AS attendance-status

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FROM students

student-id	Attendance Percentage	Attendance-status
1	90%	Excellent
2	60%	Needs Improvement
3	96%	Excellent
4	50%	Needs Improvement
5	100%	Excellent

⑧ SELECT product-id,

stock_qty

CASE

WHEN stock_qty 0 THEN 'Out of stock'

WHEN stock_qty Between 1 AND 4 THEN 'Low stock'

ELSE 'In stock'

END AS ^{stock}category-status

FROM products inventory,

Product-id	Stock_qty	Stock-status
1	5	In stock
2	0	Out of stock
3	25	In stock
4	10	In stock
5	3	Low stock

⑨ SELECT Subject,
enrolled-students
CASE

WHEN enrolled-students > 25 THEN 'Large'

WHEN enrolled-students BETWEEN 10 AND 24 THEN 'Medium'

ELSE 'Small'

END AS class-size-category

From classes,

Subject	Enrolled-students	Class-size-category
Math	30	Large
English	25	Large
Science	15	Medium
Art	5	Small
History	20	Medium

⑩ SELECT payment-id,
payment-method,
amount,

CASE

WHEN payment-method = 'Cash' AND amount > 200 THEN 'Eligible for discount'

ELSE 'Not Eligible'

END AS discount-eligibility

From payments,

Payment-id	Amount	Payment-method	Discount-eligibility
1	50.00	Card	Not Eligible
2	200.00	Cash	Eligible for discount
3	150.00	Card	Not Eligible
4	75.00	PayPal	Not Eligible
5	300.00	Cash	Eligible for discount