

Exercise 3: SQL CASE Statements

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Exercise 3

Question 1

SELECT product_name,
price,

CASE

WHEN price > 1000 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	Expensive
Phone	800	Mid-range
Keyboard	45	Budget
Monitor	300	Mid-range
Mouse	25	Budget

Question 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	150.90	Low Value
Bob	560.00	Medium Value
Charlie	999.99	Medium Value
Diana	45.50	Low Value
Ethan	1200.00	High Value

Question 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
Larry	Finance	95000	staff
Tom	HR	50000	staff

Question 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

Question 5

SELECT delivery_order,
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_cd	delivery_time_minutes	performance
1	45	on Time
2	80	Late
3	30	Fast
4	65	Late
5	100	Late

Question 6

SELECT issue_type,
priority

CASE

WHEN priority = 3 THEN 'High'

WHEN priority = 2 THEN 'Medium'

WHEN priority = 1 THEN 'Low'

END AS priority_label

FROM tickets

issue_type	priority	priority_label
login issue	1	Low
Server down	3	High
Slow down	2	Medium
Email error	2	Medium
Password reset	1	Low

Question 7

SELECT student_cd

(days_present * 100 / total_days) AS attendance_percentage

CASE

WHEN (days_present * 100 / total_days) >= 90 THEN 'Excellent'

WHEN (days_present * 100 / total_days) BETWEEN 75 AND 89 THEN 'Good'

ELSE 'Needs Improvement'

END AS attendance_status

FROM attendance

Student_id	attendance_percentage	attendance_status
1	90.0	Excellent
2	60.0	Needs Improvement
3	96.0	Excellent
4	50.0	Needs Improvement
5	100.00	Excellent

Question 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_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

Question 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
Maths	30	Large
English	25	Large
Science	15	Medium
Art	5	Small
History	20	Medium

Question 10

SELECT payment_id,
payment_method,
amount,

CASE

WHEN payment_method = 'Cash' AND amount ≥ 200 THEN 'Eligible for Discount'

ELSE 'Not Eligible'

AND AS discount_eligibility

FROM payments

payment_id	payment_method	amount	discount_eligibility
1	Card	50.00	Not eligible
2	Cash	200.00	Eligible for discount
3	Card	150.00	Not eligible
4	Pay Pal	75.00	Not eligible
5	Cash	300.00	Eligible for discount