

### Exercise 3: CASE statements

① SELECT product-name,  
 price,  
 price-category = CASE  
 WHEN price > 1000 THEN 'Expensive'  
 WHEN price BETWEEN 100 AND 1000 THEN 'Mid-range'  
 WHEN price < 100 THEN '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'  
 WHEN amount < 500 THEN '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	85 000	Senior IT
Sara	HR	60 000	Experienced HR
Mark	IT	75 000	Staff
Lucy	finance	95 000	Staff
Tom	HR	55 000	Staff

④ SELECT student-name  
 score,  
 CASE WHEN score  $\geq 90$  THEN 'A'  
 WHEN score BETWEEN 80 AND 89 THEN  
 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	63	D

⑤ SELECT delivery-id,  
 delivery-time-minutes  
 CASE WHEN delivery-time-minutes  $\leq 30$  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-on-time
1	45	Late
2	80	Fast
3	36	Late
4	65	Late
5	100	

```

⑥ SELECT issue-type,
       priority,
CASE WHEN 3 THEN 'High'
      WHEN 2 THEN 'Medium'
      WHEN 1 THEN 'Low'
ELSE NULL
END AS priority-label
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

~~① SELECT student\_id,  
(days-present \* 1.0 / total\_days) \* 100 AS  
CASE WHEN attendace -percentage,  
CASE WHEN (days-present \* 1.0 / total-days) \* 100  
>= 90 THEN 'Excellent'  
WHEN (days-present \* 1.0 / total-days) \* 100  
BETWEEN 75 AND 89 THEN 'Good'  
ELSE AS attendance\_status  
FROM attendance;~~

student_id	attendance_percentage	attendance_status
1	90	Excellent
2	60	Needs
3	96	
4	50	
5	100	

② **SELECT** student\_id,  
(days-present \* 1.0 / total\_days) \* 100 **AS** attendance\_-  
percentage  
**CASE WHEN** (days-present \* 1.0 / total-days) \* 100  
>= 90 **THEN** 'Excellent'  
**WHEN** (days-present \* 1.0 / total-days) \* 100  
**BETWEEN** 75 AND 89 **THEN** 'Good'  
**ELSE** 'Needs **AS** Improvement'  
**END AS** attendance\_status  
**FROM** attendance;

① ~~SELECT student\_id,  
 (days-present \* 1.0 / total-days) \* 100 AS attendance\_percentage,  
 CASE WHEN attendance\_percentage >= 90 THEN 'Excellent'  
 WHEN (days-present \* 1.0 / total-days) \* 100  
 BETWEEN 75 AND 89 THEN 'Good'  
 ELSE AS attendance\_status  
 FROM attendance;~~

<u>Student_id</u>	<u>attendance_percentage</u>	<u>attendance_status</u>
1	96	Excellent
2	60	Needs
3	96	
4	50	
5	100	

① ~~SELECT student\_id,  
 (days-present \* 1.0 / total-days) \* 100 AS attendance\_percentage,  
 CASE WHEN (days-present \* 1.0 / total-days) \* 100  
 >= 90 THEN 'Excellent'  
 WHEN (days-present \* 1.0 / total-days) \* 100  
 BETWEEN 75 AND 89 THEN 'Good'  
 ELSE 'Needs Improvement'  
 END AS attendance\_status  
 FROM attendance;~~

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 5 THEN  
'Low Stock'  
WHEN stock_qty > 5 THEN 'In Stock'  
END AS Stock_Status  
FROM products_inventory;`

product_id	Stock_qty	Stock_Status
1	5	Low 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  $\geq 25$  THEN 'Large'  
 WHEN enrolled-students BETWEEN 10 AND 29  
 THEN 'Medium'  
 WHEN enrolled-students < 10 THEN '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  $\geq 200$  THEN 'Eligible for Discount'  
 ELSE 'NOT Eligible'  
 END 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	Paypal	75.00	Not Eligible
5	Cash	300.00	Eligible for Discount