Exercise 3: SQL CASE statements

1.
```
SELECT product_name,
       price,
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;
```

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;
```

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 salary > 80 000 AND department = 'IT' THEN 'Senior IT'
WHEN salary > 55 000 AND department = 'HR' THEN 'Experienced HR'

ELSE 'STAFF'
END AS position_level
FROM employees;

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
WHERE score >= 90 THEN 'A'
WHERE score BETWEEN 80 and 89 THEN 'B'
WHERE score BETWEEN 70and 79 THEN 'C'
WHERE score BETWEEN 60 and 69 THEN 'D'
WHEN score < 60 THEN 'F'
END AS grade
FROM students ;

student_name	Score	grade
Anna	92	A
Ben	76	C
Cena	59	F
David	83	B
Ella	68	D

5. SELECT delivery_id,
delivery_time_minites,

CASE
WHEN delivery_time minutes <=30 THEN 'Fast'
WHEN delivey_time_minutes BETWEEN 31 and 60 THEN 'ON Time'
WHEN delivery_time_minutes = 60 THEN 'Late'
END AS performance
FROM deliveries;

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'
WHEN priority = 1 THEN 'Low'
END AS priority_label
FROM tickets;

tickets

issue_type	Priority	priority_label
Long_issue	1	Low
Server down	3	High
Slow system	2	Medium
Email error	2	Medium
Password Reset	1	Low

7. SELECT student_id,
((days_present/total_days)*100) AS attendance_Percentage;

CASE
WHEN attendance_percentage >= 90 THEN 'Excellent'
WHEN attendance_percentage BETWEEN 75 and 89 THEN 'Good'
WHEN attendance_percentage < 75 THEN 'Needs Improvement'
END AS attendance_status
FROM attendance;

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;

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'
WHEN enrolled_students < 10 THEN 'Small'
END AS class_size_category
FROM classes';

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'

~~WHEN~~ ELSE 'Not Eligible'
END AS discount_eligibility
FROM payments;

Payments

payment_id	payment_method	Method	discount_eligibility
1	Card	50.00	Not eligible
2	Cash	200.00	Eligible
3	Card	150.00	Not eligible
4	PayPal	75.00	Not eligible
5	Cash	300.00	Eligible.