Nomgqibelo Nkosi   Exercise 3

1.

Product_id	Product_name	Price	Price - category
1	laptop	1200.00	Expensive
2	phone	800.00	mid-range
3	keyboard	45.00	budget
4	monitor	300.00	mid-range
5	mouse	25.00	budget

SELECT product_name;
         price

CASE
WHEN   price < 100   THEN 'Budget'
WHEN   price BETWEEN 100 AND 1000 THEN 'mid-range'
WHEN   price > 100   THEN 'Expensive'
END AS   price- category
FROM   products;

2.

order_id	customer_name	amount	order_value_category
1	Alice	150.00	low value
2	Bob	560.00	medium value
3	charlie	999.99.	medium value
4	Diana	45.50	low value
5	Ethan	1200.00	High value

SELECT customer_name,
         amount

CASE
WHEN   amount < 500 THEN 'Low value'
WHEN   amount BETWEEN 500
AND   999,99 THEN 'medium Value'
ELSE 'High value'

3. SELECT emp-name,
         department,
         Salary

CASE
WHEN department = 'IT' AND salary
WHEN department = 'HR' AND salary
ELSE 'staff'
END AS position_level
FROM employees;

emp_id	emp-name	department	salary	employee position c
1	John	IT	85000	Senior IT
2	Sara	HR	60000	Experience HR
3	Mark	IT	75000	staff
4	Lucy	Finance	95000	staff
5	Tom	HR	55000	Experience

4. SELECT student_name,
          Score,

CASE
WHERE Score >= 90 THEN 'A'
WHEN Score BETWEEN 80 AND 89 THEN
WHEN Score BETWEEN 70 AND 79 THEN
WHEN Score BETWEEN 60 AND 69 THEN
ELSE 'F'
END AS grade
FROM students;

Student_id	student_name	Score	letter grade category
1	Anna	92	A

2	Ben	76	C
3	Cora	59	F
4	David	83	B
5	Elle	68	D

5. ```sql
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 | label delivery_time_mins category |
|---|---|---|
| 1 | 45 | on-time |
| 2 | 80 | on-time |
| 3 | 30 | fast |
| 4 | 60 | Late |
| 5 | 100 | late |

6. ```sql
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
```

Ticket_id	Issue_type	Priority	Priority to labels cate
1	Login issue	1	low
2	Server down	3	high
3	slow system	2	medium
4	email error	2	medium
5	password	1	low

7. SELECT student_id,
    (days_present * 100.0 / total_days) AS attendance_percent,
CASE
WHEN (days_present * 100.0 / total_days) >= 90
WHEN (days_present * 100.0 / total_days) BETWEEN 75 AND 89
END AS attendance_status
FROM attendance;

student_id	days_present	total_days	attendance % & classify cate
1	45	50	excellent
2	30	50	needs improvement
3	48	50	excellent
4	25	50	need improvement
5	50	50	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'
ELSE 'in stock'
END AS stock_status
FROM products_inventory;

```sql
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;
```

8.

product_id	stock_qty	label stock status category
1	5	in stock
2	0	out of stock
3	25	In stock
4	10	In stock
5	3	low stock

9.

class_id	subject	enrolled_students	classify by size
1	Math	30	medium
2	English	25	large
3	Science	15	medium
4	Art	5	small
5	History	20	medium

```sql
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;
```

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;

8. product_id	stock_qty	label stock status category
1	5	in stock
2	0	out of stock
3	25	In stock
4	10	In stock
5	3	low stock

9. class_id	subject	enrolled_students	classify by size
1	Math	30	medium
2	English	25	large
3	Science	15	medium
4	Art	5	small
5	History	20	medium

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;

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	apply discount category
1	$0.00	card	apply discount
2	200.00	card	eligible for discount
3	150.00	card	
4	75.00	paypal	
5	300.00	card	eligible for discount