Exercise 3   Belinda Thando Mnlanga.

==Question 1== Table & products

```
SELECT  product-name,
        price
        CASE
          WHEN price >1000 THEN 'Expensive'
          WHEN price BETWEEN 100 AND 1000 THEN 'Midrange'
          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.   Orders— Order Value Category==

```
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 products;
```

Customer_name	amount	order_value_category
Alice	150.00	Low Value
Bob	860.00	Medium Value
charlie	949.99	Medum Value
Diana	45.50	Lowd Value
Ethan	1200.00	High Value.

3. Employees Position Level

```
SELECT emp_name,
       department,
       salary
       CASE
           WHEN department = 'IT' AND salary > 500 80000
                               THEN 'Senior IT'
           WHEN department = 'HR' AND salary > 59000
                               THEN 'Experienced HR'
           WHEN 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.

Question 4 Table students

```sql
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'
           WHEN score < 60 THEN '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	

5.

```sql
SELECT delivery-id,
       delivery-time-minutes,
       CASE
           WHEN delivery-time-minutes <= 30 THEN 'FAST'
           WHEN delivery-time-minut BETWEEN 31 AND 60
                                          THEN 'ON TIME'
           WHEN delivery-time-minut > 60 THEN '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. Table : tickets

brokodown

```
SELECT issue_type,
       priority,
    CASE
       WHEN priority = 3 THEN 'High'
       WHEN priority = 2 THEM '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 system	2	Medium
Email error	2	Medium
Password reset	1	Low

7.

```
SELECT student_id
   (days_present *100.0 /total_days) >= THEN 'Excellent'
```

7.

```
SELECT student_id,
   (days_present * 100.0 / total_days ) As attendance_percentage;

   CASE
   WHEN (days_present * 100.0/total_days ) >= 90
                    THEN 'Excellent'
   WHEN (days-present * 100.0/total_days ) BETWEEN 75
                    AND 89 THEN 'Good'
   WHEN (days-present * 100.0/total_days) < 75 THEN
                    'Needs Improvement'
   END AS attendance_status
   FROM attendance;
```

Question 8

```sql
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

Question 9

```sql
SELECT subject,
       enrolled_students
       CASE
       WHEN enrolled_students >= 25 THEN 'Large'
       WHEN enrolled_students BETWEEN 10 AND 24 THEN 'Medium'
       WHEN enrolled_student < 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

```sql
SELECT  payment_id,
        payment-method,
        amount,
        CASE
        WHEN payment-method = 'Cash' AN amount >=200
                            THEN 'Eligible for Discount'

        WHEN,
        ELSE 'Not Eligible'
        END AS discount-eligibility

FROM payments ;
```

payment-id	payment-method	amount	discount-eligibility
1	Card	50.00	Not Eligible
2	Card	200.00	Eligible for Discount
3	card	150.00	Not Eligible
4	Paypal	75.00	Not Eligible
5	Cash	300.00	Eligible for Discoun