

WEEK 2 - SESSION 10 :

```
mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION calculate_net_salary(gross_salary DECIMAL(10,2))
  -> RETURNS DECIMAL(10,2)
  -> DETERMINISTIC
  -> BEGIN
  ->   RETURN gross_salary - (gross_salary * 0.10);
  -> END //
Query OK, 0 rows affected (0.01 sec)
```

```
mysql>
mysql> DELIMITER ;
mysql> SELECT calculate_net_salary(50000) AS net_salary;
+-----+
| net_salary |
+-----+
| 45000.00 |
+-----+
1 row in set (0.01 sec)
```

```
mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION check_user_activity(last_login DATE)
  -> RETURNS VARCHAR(20)
  -> DETERMINISTIC
  -> BEGIN
  ->   IF DATEDIFF(CURDATE(), last_login) <= 30 THEN
  ->     RETURN 'Active';
  ->   ELSE
  ->     RETURN 'Inactive';
  ->   END IF;
  -> END //
Query OK, 0 rows affected (0.02 sec)
```

```
mysql>
mysql> DELIMITER ;
mysql> SELECT check_user_activity('2026-01-20') AS status;
+-----+
| status |
+-----+
| Active |
+-----+
1 row in set (0.00 sec)
```

```
mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION calculate_tax(salary DECIMAL(12,2))
  -> RETURNS DECIMAL(12,2)
  -> DETERMINISTIC
  -> BEGIN
  ->   DECLARE tax DECIMAL(12,2);
  ->
  ->   IF salary <= 300000 THEN
  ->     SET tax = 0;
  ->   ELSEIF salary <= 600000 THEN
  ->     SET tax = salary * 0.10;
  ->   ELSEIF salary <= 1000000 THEN
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-> SET tax = salary * 0.20;
-> ELSE
-> SET tax = salary * 0.30;
-> END IF;
->
-> RETURN tax;
-> END //

```

Query OK, 0 rows affected (0.01 sec)

```

mysql>
mysql> DELIMITER ;
mysql> SELECT calculate_tax(750000) AS tax_amount;

```

```

+-----+
| tax_amount |
+-----+
| 150000.00 |
+-----+
1 row in set (0.00 sec)

```

```

mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION employee_category(years INT)
-> RETURNS VARCHAR(20)
-> DETERMINISTIC
-> BEGIN
-> IF years < 2 THEN
-> RETURN 'Fresher';
-> ELSEIF years BETWEEN 2 AND 5 THEN
-> RETURN 'Junior';
-> ELSEIF years BETWEEN 6 AND 10 THEN
-> RETURN 'Mid';
-> ELSE
-> RETURN 'Senior';
-> END IF;
-> END //

```

Query OK, 0 rows affected (0.02 sec)

```

mysql>
mysql> DELIMITER ;
mysql> SELECT employee_category(7) AS category;

```

```

+-----+
| category |
+-----+
| Mid      |
+-----+
1 row in set (0.00 sec)

```

```

mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION calculate_late_fee(due_date DATE, return_date DATE)
-> RETURNS INT
-> DETERMINISTIC
-> BEGIN
-> DECLARE days_late INT;
-> DECLARE fine INT;
->
-> SET days_late = DATEDIFF(return_date, due_date);
->
-> IF days_late <= 0 THEN
-> SET fine = 0;

```

```
-> ELSE
->     SET fine = days_late * 50;
->
->     IF fine > 1000 THEN
->         SET fine = 1000;
->     END IF;
-> END IF;
->
-> RETURN fine;
-> END //
```

Query OK, 0 rows affected (0.12 sec)

mysql>

mysql> DELIMITER ;

mysql> SELECT calculate_late_fee('2026-01-01', '2026-01-25') AS late_fee;

```
+-----+
```

```
| late_fee |
```

```
+-----+
```

```
|    1000 |
```

```
+-----+
```

1 row in set (0.00 sec)