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Lab – 15

```
create database lab15;
```

```
use lab15;
```

```
-- Create EMPLOYEES table
```

```
CREATE TABLE EMPLOYEES (  
    employee_id INT PRIMARY KEY,  
    first_name VARCHAR(50),  
    last_name VARCHAR(50),  
    salary DECIMAL(10, 2)  
);
```

```
-- Insert sample data into EMPLOYEES table
```

```
INSERT INTO EMPLOYEES (employee_id, first_name, last_name, salary)  
VALUES  
(1, 'John', 'Doe', 2000),  
(2, 'Jane', 'Smith', 3000),  
(3, 'Robert', 'Johnson', 4000),  
(4, 'Emily', 'Davis', 1500);
```

```
mysql> select * from EMPLOYEES;
```

employee_id	first_name	last_name	salary
1	John	Doe	2000.00
2	Jane	Smith	3000.00
3	Robert	Johnson	4000.00
4	Emily	Davis	1500.00

```
4 rows in set (0.00 sec)
```

```
-- Update salaries and count the number of records updated
```

```
DELIMITER $$
```

```
CREATE PROCEDURE UpdateSalaries()
```

```
BEGIN
```

```
    DECLARE rows_updated INT;
```

```
    -- Update salaries
```

```
    UPDATE EMPLOYEES
```

```
    SET salary = salary * 1.10;
```

```
    -- Get the number of affected rows
```

```
    SET rows_updated = ROW_COUNT();
```

```
    -- Display the result
```

```
    IF rows_updated = 0 THEN
```

```
        SELECT 'No Change' AS Message;
```

```
    ELSE
```

```
        SELECT CONCAT(rows_updated, ' record(s) updated') AS Message;
    END IF;
END$$
```

```
DELIMITER ;
```

```
-- Call the procedure
CALL UpdateSalaries();
```

```
+-----+
| Message |
+-----+
| 4 record(s) updated |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

```
mysql> SELECT * FROM EMPLOYEES;
+-----+-----+-----+-----+
| employee_id | first_name | last_name | salary |
+-----+-----+-----+-----+
|          1 | John      | Doe       | 2200.00 |
|          2 | Jane      | Smith     | 3300.00 |
|          3 | Robert    | Johnson   | 4400.00 |
|          4 | Emily     | Davis     | 1650.00 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
DELIMITER $$
```

```
CREATE PROCEDURE FetchEmployeeDetails()
```

BEGIN

DECLARE done INT DEFAULT 0;

DECLARE emp_id INT;

DECLARE emp_name VARCHAR(100);

DECLARE emp_salary DECIMAL(10, 2);

-- Cursor declaration

DECLARE emp_cursor CURSOR FOR

SELECT employee_id, CONCAT(first_name, ' ', last_name), salary FROM
EMPLOYEES;

-- Handler for end of data

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

-- Open the cursor

OPEN emp_cursor;

FETCH emp_cursor INTO emp_id, emp_name, emp_salary;

-- Loop through the cursor

REPEAT

IF NOT done THEN

SELECT emp_id AS Employee_ID, emp_name AS Name, emp_salary AS
Salary;

END IF;

FETCH emp_cursor INTO emp_id, emp_name, emp_salary;

UNTIL done END REPEAT;

```
-- Close the cursor  
CLOSE emp_cursor;  
END$$
```

```
DELIMITER ;
```

```
-- Call the procedure  
CALL FetchEmployeeDetails();
```

```

myemp = cursor.execute('select * from emp')

+-----+-----+-----+
| Employee_ID | Name      | Salary |
+-----+-----+-----+
|           1 | John Doe  | 2200.00 |
+-----+-----+-----+
1 row in set (0.00 sec)

+-----+-----+-----+
| Employee_ID | Name      | Salary |
+-----+-----+-----+
|           2 | Jane Smith | 3300.00 |
+-----+-----+-----+
1 row in set (0.01 sec)

+-----+-----+-----+
| Employee_ID | Name      | Salary |
+-----+-----+-----+
|           3 | Robert Johnson | 4400.00 |
+-----+-----+-----+
1 row in set (0.01 sec)

+-----+-----+-----+
| Employee_ID | Name      | Salary |
+-----+-----+-----+
|           4 | Emily Davis | 1650.00 |
+-----+-----+-----+
1 row in set (0.02 sec)

Query OK, 0 rows affected (0.02 sec)

```

-- Create TEMP_EMP table

```

CREATE TABLE TEMP_EMP (
    employee_id INT PRIMARY KEY,
    last_name VARCHAR(50),
    salary DECIMAL(10, 2)
);

```

DELIMITER \$\$

CREATE PROCEDURE InsertHighSalaryEmployees()

BEGIN

DECLARE done INT DEFAULT 0;

DECLARE emp_id INT;

DECLARE emp_last_name VARCHAR(50);

DECLARE emp_salary DECIMAL(10, 2);

-- Cursor declaration

DECLARE emp_cursor CURSOR FOR

SELECT employee_id, last_name, salary FROM EMPLOYEES WHERE salary > 2500;

-- Handler for end of data

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

-- Open the cursor

OPEN emp_cursor;

FETCH emp_cursor INTO emp_id, emp_last_name, emp_salary;

-- Loop through the cursor

REPEAT

IF NOT done THEN

INSERT INTO TEMP_EMP (employee_id, last_name, salary)

VALUES (emp_id, emp_last_name, emp_salary);

```

        END IF;

        FETCH emp_cursor INTO emp_id, emp_last_name, emp_salary;
UNTIL done END REPEAT;

-- Close the cursor
CLOSE emp_cursor;

-- Display inserted data
SELECT * FROM TEMP_EMP;
END$$

DELIMITER ;

-- Call the procedure
CALL InsertHighSalaryEmployees();

```

```

+-----+-----+-----+
| employee_id | last_name | salary |
+-----+-----+-----+
|          2 | Smith    | 3300.00 |
|          3 | Johnson  | 4400.00 |
+-----+-----+-----+
2 rows in set (0.01 sec)

Query OK, 0 rows affected (0.02 sec)

```