

Table name: employee

Table schema

Column name or Field name	Datatype
employee_id(pk)	int
first_name	varchar(50)
last_name	varchar(50)
email	varchar(50)
phone_number	varchar(50)
hire_date	date
job_id	int
salary	float

Write a program in PL/SQL to display a Cursor based detail information of all employees such as first_name, last_name, email, salary from employee table.

Explanation:

Data fetched from the table must be stored in cursor and by using loop data must be fetched from the cursor and must be displayed.

```
1  -- PL/SQL
2
3  DECLARE
4      -- Define a cursor to select the required fields from the employee table
5      CURSOR emp_cursor IS
6          SELECT first_name, last_name, email, salary
7          FROM employee;
8
9      -- Define a record type to hold the cursor data
10     emp_record emp_cursor%ROWTYPE;
11 BEGIN
12     -- Open the cursor and loop through the records
13     OPEN emp_cursor;
14     LOOP
15         -- Fetch each record into the emp_record variable
16         FETCH emp_cursor INTO emp_record;
17
18         -- Exit the loop when no more records are found
19         EXIT WHEN emp_cursor%NOTFOUND;
20
21         -- Display the employee details
22         DBMS_OUTPUT.PUT_LINE('First Name: ' || emp_record.first_name ||
23                               ', Last Name: ' || emp_record.last_name ||
24                               ', Email: ' || emp_record.email ||
25                               ', Salary: ' || emp_record.salary);
26     END LOOP;
27
28     -- Close the cursor
29     CLOSE emp_cursor;
30 EXCEPTION
31     WHEN OTHERS THEN
32         -- Handle any exceptions that may occur
33         DBMS_OUTPUT.PUT_LINE('An error occurred: ' || SQLERRM);
34         IF emp_cursor%ISOPEN THEN
35             CLOSE emp_cursor;
36         END IF;
37 END;
38 /
39
```

```
1  -- MySQL Server
2
3  DELIMITER $$
4
5  CREATE PROCEDURE DisplayEmployeeDetails()
6  BEGIN
7      -- Declare variables to hold the fetched data
8      DECLARE v_first_name VARCHAR(50);
9      DECLARE v_last_name VARCHAR(50);
10     DECLARE v_email VARCHAR(50);
11     DECLARE v_salary FLOAT;
12
13     -- Declare a cursor for selecting employee details
14     DECLARE emp_cursor CURSOR FOR
15         SELECT first_name, last_name, email, salary
16         FROM employee;
17
18     -- Declare a handler for NOT FOUND
19     DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;
20
21     -- Initialize the done flag
22     SET done = FALSE;
23
24     -- Open the cursor
25     OPEN emp_cursor;
26
27     -- Loop through the cursor
28     read_loop: LOOP
29         -- Fetch the next row into the variables
30         FETCH emp_cursor INTO v_first_name, v_last_name, v_email, v_salary;
31
32         -- Exit the loop if there are no more rows
33         IF done THEN
34             LEAVE read_loop;
35         END IF;
36
37         -- Display the employee details
38         SELECT CONCAT('First Name: ', v_first_name,
39                     ', Last Name: ', v_last_name,
40                     ', Email: ', v_email,
41                     ', Salary: ', v_salary) AS EmployeeDetails;
42     END LOOP;
43
44     -- Close the cursor
45     CLOSE emp_cursor;
46 END$$
47
48 DELIMITER ;
49
50 -- calling procedure
51
52 CALL DisplayEmployeeDetails();
```