Subqueries separated by “ ****** ”
Questions separated by “ ====== ”

17. Cursor (Any Two)
a) The bank manager has decided to activate all those accounts which were previously marked as
inactive for performing no transaction in last 365 days. Write a PL/SQ block (using implicit
cursor) to update the status of account, display an approximate message based on the no. of rows
affected by the update. (Use of %FOUND, %NOTFOUND, %ROWCOUNT)
ANSWER:-

```
CREATE DATABASE practest;
********************************************************************************
************
Use practest;
********************************************************************************
************
CREATE TABLE accounts (
    account_id INT AUTO_INCREMENT PRIMARY KEY,
    account_name VARCHAR(100) NOT NULL,
    status ENUM('Active', 'Inactive') DEFAULT 'Inactive',
    last_transaction_date DATE
);
********************************************************************************
************
INSERT INTO accounts (account_name, status, last_transaction_date)
VALUES
    ('Amit Kumar', 'Inactive', '2022-10-20'),
    ('Priya Sharma', 'Inactive', '2023-01-15'),
    ('Ravi Verma', 'Active', '2024-05-10'),
    ('Neha Patel', 'Inactive', '2022-09-30'),
    ('Kiran Desai', 'Inactive', '2024-06-01'),
    ('Vijay Rao', 'Inactive', '2023-11-05');
********************************************************************************
************
DELIMITER //
CREATE PROCEDURE ActivateInactiveAccounts()
BEGIN
    DECLARE v_rows_updated INT DEFAULT 0;

    UPDATE accounts
    SET status = 'Active'
    WHERE status = 'Inactive'
      AND last_transaction_date <= DATE_SUB(CURDATE(), INTERVAL 365 DAY);
      SET v_rows_updated = ROW_COUNT();

    IF v_rows_updated > 0 THEN
        SELECT CONCAT(v_rows_updated, ' accounts were activated.') AS message;
    ELSE
        SELECT 'No accounts were found to activate.' AS message;
    END IF;
END //
DELIMITER ;
********************************************************************************
************
CALL ActivateInactiveAccounts();
********************************************************************************
```

```
************
select * from accounts;
================================================================================
============
================================================================================
============


17. Cursor (Any Two)
c)Write the PL/SQL block for following requirements using parameterized Cursor:
Consider
table EMP(e_no, d_no, Salary), department wise average salary should be inserted
into new
table dept_salary(d_no, Avg_salary)
ANSWER:-

CREATE TABLE EMP (
    e_no INT PRIMARY KEY,
    d_no INT,
    salary DECIMAL(10, 2)
);

CREATE TABLE dept_salary (
    d_no INT PRIMARY KEY,
    avg_salary DECIMAL(10, 2)
);
********************************************************************************
***********
INSERT INTO EMP (e_no, d_no, salary) VALUES
    (1, 101, 5000),
    (2, 101, 6000),
    (3, 102, 7000),
    (4, 102, 8000),
    (5, 103, 7500);
********************************************************************************
***********
DELIMITER $$

CREATE PROCEDURE CalculateDeptAvgSalary()
BEGIN
    DECLARE done INT DEFAULT 0;
    DECLARE v_dno INT;
    DECLARE v_avg_salary DECIMAL(10, 2);

    DECLARE dept_cursor CURSOR FOR
        SELECT DISTINCT d_no FROM EMP;

    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

    OPEN dept_cursor;

    read_loop: LOOP
        FETCH dept_cursor INTO v_dno;

        IF done THEN
            LEAVE read_loop;
        END IF;

        SELECT AVG(salary) INTO v_avg_salary
```

```
        FROM EMP
        WHERE d_no = v_dno;

        INSERT INTO dept_salary (d_no, avg_salary)
        VALUES (v_dno, v_avg_salary);

    END LOOP;

    CLOSE dept_cursor;

    COMMIT;

    SELECT 'Department-wise average salary has been inserted.' AS message;
END$$

DELIMITER ;
********************************************************************************
******************
CALL CalculateDeptAvgSalary();
********************************************************************************
******************
SELECT * FROM dept_salary;
```