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

16. 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();
********************************************************************************
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************
select * from accounts;


================================================================================
16. Cursor (Any Two)
c) Write PL/SQL block using explicit cursor for following requirements: College has
decided to
mark all those students detained (D) who are having attendance less than 75%.
Whenever such
update takes place, a record for the same is maintained in the D_Stud table. create
table
stud21(roll number(4), att number(4), status varchar(1));
ANSWER:-
CREATE TABLE stud21 (
    roll INT(4) PRIMARY KEY,
    att INT(4),
    status VARCHAR(1) DEFAULT 'N'
);
********************************************************************************
******
CREATE TABLE D_Stud (
    roll INT(4),
    detention_date DATE
);
********************************************************************************
INSERT INTO stud21 (roll, att, status) VALUES
    (1001, 80, 'N'),
    (1002, 70, 'N'),
    (1003, 60, 'N'),
    (1004, 85, 'N'),
    (1005, 72, 'N');
********************************************************************************
DELIMITER //

CREATE PROCEDURE MarkDetainedStudents()
BEGIN
    DECLARE done INT DEFAULT FALSE;
    DECLARE v_roll INT;
    DECLARE v_att INT;

    DECLARE cur_detained_students CURSOR FOR
        SELECT roll, att
        FROM stud21
        WHERE att < 75;

    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

    OPEN cur_detained_students;
    read_loop: LOOP
        FETCH cur_detained_students INTO v_roll, v_att;

        IF done THEN
            LEAVE read_loop;
        END IF;

        UPDATE stud21
        SET status = 'D'
        WHERE roll = v_roll;
```

```
        INSERT INTO D_Stud (roll, detention_date)
        VALUES (v_roll, CURDATE());
    END LOOP;
    CLOSE cur_detained_students;
    COMMIT;
    SELECT 'All students with attendance below 75% have been marked as detained.'
AS Message;
END //
DELIMITER ;
********************************************************************************
***********
CALL MarkDetainedStudents();
********************************************************************************
***********
select * from stud21;

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```