**Practical no 21**

-- Step 1: Create Database

CREATE DATABASE CollegeDB;

USE CollegeDB;

-- Step 2: Create student Table

CREATE TABLE student (

roll\_no INT PRIMARY KEY,

name VARCHAR(50),

department VARCHAR(50)

);

-- Step 3: Insert Sample Records

INSERT INTO student VALUES

(1, 'Yash', 'Computer'),

(2, 'Ritu', 'Electrical'),

(3, 'Tejas', 'Computer'),

(4, 'Amit', 'Civil'),

(5, 'Sneha', 'Computer');

-- Step 4: Create Stored Procedure with Cursor

DELIMITER $$

CREATE PROCEDURE DisplayComputerStudents()

BEGIN

-- Declare variables

DECLARE v\_rollno INT;

DECLARE v\_name VARCHAR(50);

DECLARE v\_dept VARCHAR(50);

-- Declare condition variable

DECLARE done INT DEFAULT 0;

-- Declare cursor

DECLARE comp\_cursor CURSOR FOR

SELECT roll\_no, name, department

FROM student

WHERE department = 'Computer';

-- Handler for end of records

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

-- Open cursor

OPEN comp\_cursor;

-- Loop to fetch and display data

read\_loop: LOOP

FETCH comp\_cursor INTO v\_rollno, v\_name, v\_dept;

IF done = 1 THEN

LEAVE read\_loop;

END IF;

SELECT CONCAT('Roll No: ', v\_rollno,

' | Name: ', v\_name,

' | Department: ', v\_dept) AS StudentDetails;

END LOOP;

-- Close cursor

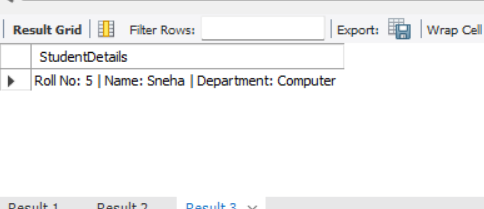
CLOSE comp\_cursor;

END$$

DELIMITER ;

-- Step 5: Execute Procedure

CALL DisplayComputerStudents();



Q2.

DELIMITER $$

CREATE PROCEDURE DisplayEvenStudents()

BEGIN

DECLARE v\_rollno INT;

DECLARE v\_name VARCHAR(50);

DECLARE v\_dept VARCHAR(50);

DECLARE done INT DEFAULT 0;

-- Cursor for even roll numbers

DECLARE even\_cursor CURSOR FOR

SELECT roll\_no, name, department

FROM student

WHERE MOD(roll\_no, 2) = 0;

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

OPEN even\_cursor;

read\_loop: LOOP

FETCH even\_cursor INTO v\_rollno, v\_name, v\_dept;

IF done = 1 THEN

LEAVE read\_loop;

END IF;

SELECT CONCAT('Roll No: ', v\_rollno,

' | Name: ', v\_name,

' | Department: ', v\_dept) AS EvenStudentDetails;

END LOOP;

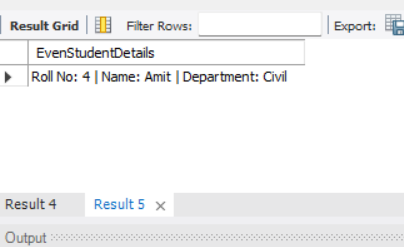
CLOSE even\_cursor;

END$$

DELIMITER ;

-- Execute procedure

CALL DisplayEvenStudents();



Q3.

CREATE TABLE store (

item\_id INT PRIMARY KEY,

item\_name VARCHAR(50),

price DECIMAL(10,2)

);

INSERT INTO store VALUES

(1, 'Laptop', 50000),

(2, 'Mouse', 500),

(3, 'Printer', 12000),

(4, 'Keyboard', 1500),

(5, 'Monitor', 20000);

DELIMITER $$

CREATE PROCEDURE CountExpensiveItems()

BEGIN

DECLARE v\_item\_id INT;

DECLARE v\_item\_name VARCHAR(50);

DECLARE v\_price DECIMAL(10,2);

DECLARE done INT DEFAULT 0;

DECLARE v\_count INT DEFAULT 0;

-- Cursor for items with price > 10000

DECLARE expensive\_cursor CURSOR FOR

SELECT item\_id, item\_name, price

FROM store

WHERE price > 10000;

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

OPEN expensive\_cursor;

read\_loop: LOOP

FETCH expensive\_cursor INTO v\_item\_id, v\_item\_name, v\_price;

IF done = 1 THEN

LEAVE read\_loop;

END IF;

SET v\_count = v\_count + 1;

END LOOP;

CLOSE expensive\_cursor;

SELECT CONCAT('Number of items with price > 10000: ', v\_count) AS ExpensiveItemCount;

END$$

DELIMITER ;

-- Execute procedure

CALL CountExpensiveItems();

