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| **NAME** | **KAVY ZINTA** |
| **UID** | **23BCS11350** |
| **CLASS** | **622-A** |
| **SUBJECT** | **ADBMS** |

Part A: Insert Multiple Fee Payments in a Transaction

Part B: Demonstrate ROLLBACK for Failed Payment Insertion Part C: Simulate Partial Failure and Ensure Consistent State Part D: Verify ACID Compliance with Transaction Flow

# CODE :

CREATE DATABASE IF NOT EXISTS db\_43x3epzm3;

USE db\_43x3epzm3;

DROP TABLE IF EXISTS FeePayments;

CREATE TABLE FeePayments ( payment\_id INT PRIMARY KEY,

student\_name VARCHAR(100) NOT NULL, amount DECIMAL(10,2) CHECK (amount > 0), payment\_date DATE

**);**

# START TRANSACTION;

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES

(1, 'Ashish', 5000.00, '2024-06-01'),

(2, 'Smaran', 4500.00, '2024-06-02'),

(3, 'Vaibhav', 5500.00, '2024-06-03');

# COMMIT;

SELECT \* FROM FeePayments;

# START TRANSACTION;

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES (4, 'Kiran', 6000.00, '2024-06-04');

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES (1, 'Ashish', -500.00, '2024-06-05');

# ROLLBACK;

SELECT \* FROM FeePayments;

# START TRANSACTION;

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES (5, 'Rahul', 4000.00, '2024-06-06');

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES (6, NULL, 3000.00, '2024-06-07');

# ROLLBACK;

SELECT \* FROM FeePayments;

# START TRANSACTION;

INSERT INTO FeePayments (payment\_id, student\_name, amount, payment\_date) VALUES (7, 'Ankit', 5000.00, '2024-06-08');

# COMMIT;

SELECT \* FROM FeePayments;







