**Sanjivani College of Engineering,**

**Department of Computer Engineering.**

**DATABASE MANAGEMENT SYSTEM LABORATORY.**

* Name: Nikita Rajendra Bhawar
* Class: SY A
* Roll No.:18
* PRN No. : UCS21F1018
* Assignment No.:6
* Problem Statement:-

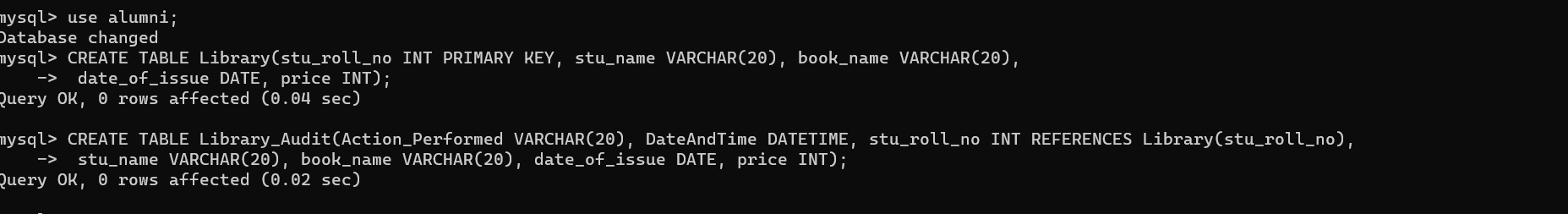
Write a database trigger on Library table. The System should keep track of the records that are being updated or deleted. The old value of updated or deleted records should be added in Library\_Audit table.

* Create tables :-

CREATE TABLE Library(stu\_roll\_no INT PRIMARY KEY, stu\_name VARCHAR(20), book\_name VARCHAR(20),

date\_of\_issue DATE, price INT);

CREATE TABLE Library\_Audit(Action\_Performed VARCHAR(20), DateAndTime DATETIME, stu\_roll\_no INT REFERENCES Library(stu\_roll\_no),

 stu\_name VARCHAR(20), book\_name VARCHAR(20), date\_of\_issue DATE, price INT);

* Insert values:-

INSERT INTO Library VALUES

(1, 'Vidyut', 'DBMS', '2021-07-21', 300),

(2, 'Pratap', 'CNS', '2021-05-21', 500),

(3, 'Kailash', 'SPOS', '2021-07-10', 400),

(4, 'Mukund', 'OOP', '2021-08-16', 250),

(5, 'Girish', 'DSA', '2021-06-26', 650),

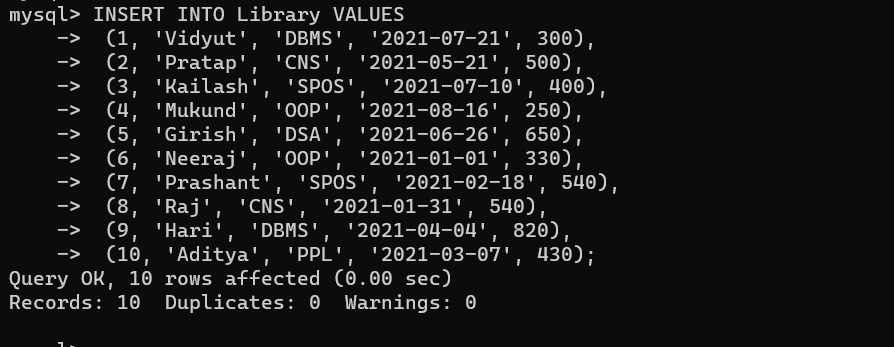
(6, 'Neeraj', 'OOP', '2021-01-01', 330),

(7, 'Prashant', 'SPOS', '2021-02-18', 540),

(8, 'Raj', 'CNS', '2021-01-31', 540),

(9, 'Hari', 'DBMS', '2021-04-04', 820),

(10, 'Aditya', 'PPL', '2021-03-07', 430);



* Code:-

DELIMITER $$

CREATE TRIGGER trig\_library\_insert AFTER INSERT ON library

FOR EACH ROW

BEGIN

INSERT INTO Library\_Audit VALUES ("INSERT", NOW(), NEW.stu\_roll\_no, NEW.stu\_name, NEW.book\_name, NEW.date\_of\_issue, NEW.price);

END $$

DELIMITER $$

CREATE TRIGGER trig\_library\_update AFTER UPDATE ON library

FOR EACH ROW

BEGIN

INSERT INTO Library\_Audit VALUES ("UPDATE", NOW(), OLD.stu\_roll\_no, OLD.stu\_name, OLD.book\_name, OLD.date\_of\_issue, OLD.price);

END $$

DELIMITER $$

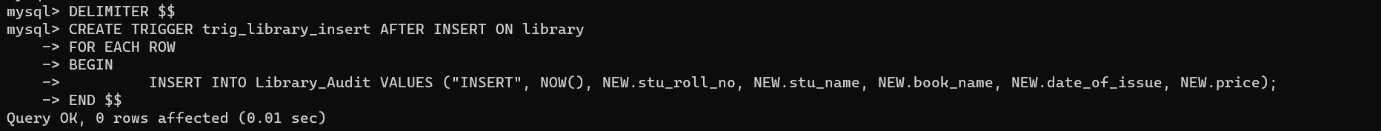
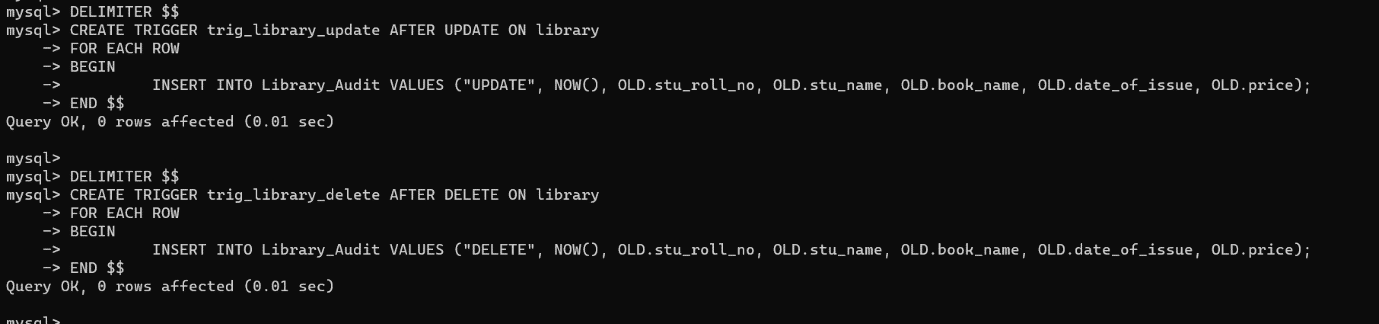
CREATE TRIGGER trig\_library\_delete AFTER DELETE ON library

FOR EACH ROW

BEGIN

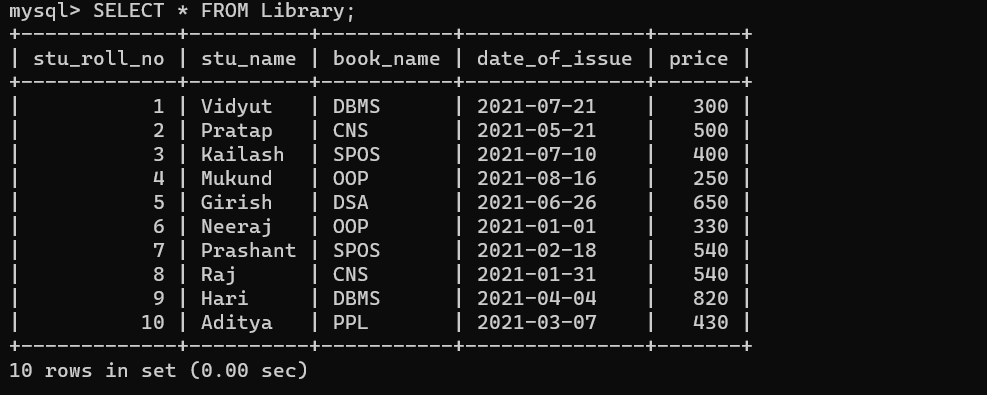
INSERT INTO Library\_Audit VALUES ("DELETE", NOW(), OLD.stu\_roll\_no, OLD.stu\_name, OLD.book\_name, OLD.date\_of\_issue, OLD.price);

END $$

DELIMITER ;

SELECT \* FROM Library;

SELECT \* FROM Library\_Audit;

UPDATE Library SET stu\_name = "Tushar" WHERE stu\_name = "Pratap";

UPDATE Library SET stu\_name = "Tushar" WHERE stu\_name = "Hari";

DELETE FROM Library WHERE stu\_name = "Tushar";

DELETE FROM Library WHERE book\_name = "OOP";

INSERT INTO Library VALUES(15, 'Ajay', 'PPS', '2021-08-26', 700);

INSERT INTO Library VALUES(20, 'Karan', 'DSA', '2021-02-11', 900);

