CREATE TABLE Library(

stu\_roll\_no INT PRIMARY KEY,

stu\_name VARCHAR(20),

book\_name VARCHAR(20),

date\_of\_issue DATE,

price INT

);

Query OK, 0 rows affected (0.172 sec)

MariaDB [te31260\_db]>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);

Query OK, 0 rows affected (0.172 sec)

MariaDB [te31260\_db]>INSERT INTO Library VALUES

(1, 'Sakshi', 'DBMS', '2024-07-21', 300),

(2, 'Prajwal', 'CNS', '2024-05-21', 500),

(3, 'Gayatri', 'SPOS', '2024-07-10', 400),

(4, 'Pranav', 'OOP', '2024-08-16', 250),

(5, 'Raghav', 'DSA', '2024-06-26', 650),

(6, 'Rutuja', 'OOP', '2024-01-01', 330),

(7, 'Dhanvantari', 'SPOS', '2024-02-18', 540),

(8, 'Pornima', 'CNS', '2024-01-31', 540),

(9, 'Parth', 'DBMS', '2024-04-04', 820),

(10, 'Mahi', 'PPL', '2024-03-07', 430);

Query OK, 10 rows affected (0.048 sec)

Records: 10 Duplicates: 0 Warnings: 0

MariaDB [te31260\_db]>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 $$

MariaDB [te31260\_db]>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 $$

Query OK, 0 rows affected (0.080 sec)

MariaDB [te31260\_db]>DELIMITER ;

MariaDB [te31260\_db]>DELIMITER $$

CREATE TRIGGER trig\_library\_delete

BEFORE 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 $$

Query OK, 0 rows affected (0.066 sec)

MariaDB [te31260\_db]>DELIMITER ;

-- Select all records from Library table

MariaDB [te31260\_db]> select \* from Library;

+-------------+-------------+-----------+---------------+-------+

| stu\_roll\_no | stu\_name | book\_name | date\_of\_issue | price |

+-------------+-------------+-----------+---------------+-------+

| 1 | Sakshi | DBMS | 2024-07-21 | 300 |

| 2 | Prajwal | CNS | 2024-05-21 | 500 |

| 3 | Gayatri | SPOS | 2024-07-10 | 400 |

| 4 | Pranav | OOP | 2024-08-16 | 250 |

| 5 | Raghav | DSA | 2024-06-26 | 650 |

| 6 | Rutuja | OOP | 2024-01-01 | 330 |

| 7 | Dhanvantari | SPOS | 2024-02-18 | 540 |

| 8 | Pornima | CNS | 2024-01-31 | 540 |

| 9 | Parth | DBMS | 2024-04-04 | 820 |

| 10 | Mahi | PPL | 2024-03-07 | 430 |

+-------------+-------------+-----------+---------------+-------+

10 rows in set (0.002 sec)

**Update Operation:**

MariaDB [te31260\_db]> update Library set stu\_name = "Sweety" where stu\_name="Pornima";

Query OK, 1 row affected (0.044 sec)

Rows matched: 1 Changed: 1 Warnings: 0

**Deletion:**

MariaDB [te31260\_db]>DELETE FROM Library WHERE stu\_name = 'Raghav';

Query OK, 1 row affected (0.035 sec)

**Insertion:**

MariaDB [te31260\_db]>INSERT INTO Library VALUES(20, 'Riya', 'PPS', '2024-08-26', 700);

Query OK, 1 row affected (0.029 sec)

MariaDB [te31260\_db]> select \* from Library\_Audit;

+------------------+---------------------+-------------+----------+-----------+---------------+-------+

| Action\_Performed | DateAndTime | stu\_roll\_no | stu\_name | book\_name |

date\_of\_issue | price |

+------------------+---------------------+-------------+----------+-----------+---------------+-------+

| UPDATE | 2024-09-11 12:28:34 | 8 | Pornima | CNS | 2024-01-31 | 540 |

| DELETE | 2024-09-11 12:29:09 | 5 | Raghav | DSA | 2024-06-26 | 650 |

| INSERT | 2024-09-11 12:29:47 | 20 | Riya | PPS | 2024-08-26 | 700

|

+------------------+---------------------+-------------+----------+-----------+---------------+-------+

3 rows in set (0.001 sec)