**Program 1:**

Create a table as :  salary Log Table

Structure of Log Table is as follows :  create table Salary\_Log(log\_id int primary key auto\_increment,employee\_id int,new\_salary decimal(10,2),change\_date timestamp default current\_timestamp);

Write a database connectivity program to create and execute trigger on this table whenever a new record is inserted with new salary.

**Code:**

/\*

Create salary Log Table:

create table Salary\_Log(log\_id int primary key auto\_increment,employee\_id int,new\_salary decimal(10,2),change\_date timestamp default current\_timestamp);

\*/

package jdbcConnectivity;

import java.sql.Connection;

import java.sql.Statement;

public class SalaryLogTrigger {

    public static void main(String[] args) {

        try (Connection connection = ConnectDB.dbConnect(); Statement statement = connection.createStatement()) {

            // Define the SQL statement to create a trigger

            String createTriggerSQL = "CREATE TRIGGER update\_salary\_trigger\r\n" + "AFTER UPDATE ON employee\r\n"

                    + "FOR EACH ROW\r\n" + "BEGIN\r\n" + "    IF NEW.salary != OLD.salary THEN\r\n"

                    + "        INSERT INTO Salary\_Log (employee\_id, new\_salary) VALUES (NEW.eid, NEW.salary);\r\n"

                    + "    END IF;\r\n" + "END;";

 // Execute the SQL statement to create the trigger

            statement.executeUpdate(createTriggerSQL);

            System.out.println("Trigger created successfully.");

        } catch (Exception e) {

            e.printStackTrace();

        }

    }

}

**Program 2:**

Create a table as :  products Table.

create table products(product\_id int primary key auto\_increment,product\_name varchar(10),price decimal(10,2));

createanother Table as  :  Product\_Metadata table

create table Product\_Metadata(product\_id int,last\_modified Timestamp default CURRENT\_TIMESTAMP ON uPDATE CURRENT\_TIMESTAMP);

Write a database connectivity program to create and execute trigger that insert record in Product\_Metadata  table after new record insertion in products table.

**Code:**

/\*First create Products table-

create table products(product\_id int primary key auto\_increment,product\_name varchar(10),price decimal(10,2));

create Product\_Metadata table-

create table Product\_Metadata(product\_id int,last\_modified Timestamp default CURRENT\_TIMESTAMP ON uPDATE CURRENT\_TIMESTAMP);

\*/

package jdbcConnectivity;

import java.sql.Connection;

import java.sql.Statement;

public class ProductTrigger {

    public static void main(String[] args) {

        try (Connection connection = ConnectDB.dbConnect(); Statement statement = connection.createStatement()) {

            // Define the SQL statement to create a trigger

            String createTriggerSQL = "CREATE TRIGGER update\_last\_modified\_trigger\r\n" + "AFTER INSERT ON Products\r\n"

                    + "FOR EACH ROW\r\n" + "BEGIN\r\n"

                    + "    INSERT INTO Product\_Metadata (product\_id) VALUES (NEW.product\_id)\r\n"

                    + "    ON DUPLICATE KEY UPDATE last\_modified = CURRENT\_TIMESTAMP;\r\n" + "END;";

   // Execute the SQL statement to create the trigger

            statement.executeUpdate(createTriggerSQL);

            System.out.println("Trigger created successfully.");

        } catch (Exception e) {

            e.printStackTrace();

        }

    }

}

/\*

Run Insert query ffrom SQL CommandLine client

INSERT INTO Products (product\_name, price) VALUES ("phone", 60000);

\*/