Computer Science and Engineering Department Motillal Nehru National Institute of Technology Allahabad B.Tech V Semester

DBMS Lab (CSN15401)

Assignment-9

1. Consider the tables 'Customers' and 'Orders' with the given schema and data as follows:

Table: Customers

customer_id	name	email	created_at	status
1	John Doe	john@example.com	2023-01-05 10:00:00	active
2	Jane Smith	jane@example.com	2023-02-10 11:30:00	inactive
3	Mike Johnson	mike@example.com	2023-03-12 12:15:00	active

Table: Orders

order_id	customer_id	order_date	total_amount	status
101	1	2023-04-01 09:00:00	500.00	pending
102	3	2023-05-21 10:00:00	1200.00	confirmed
103	1	2023-06-15 11:45:00	800.00	shipped

For the above scenario, write SQL queries for the following:

- a) Write a trigger that automatically updates a customer's status to 'active' whenever they place a new order.
- b) Write a trigger that prevents a new order from being inserted into the Orders table if the customer's status is 'inactive'.
- c) Create a trigger that automatically updates the status of an order to 'confirmed' if the 'total_amount of the order exceeds \$1000.
- d) Create a trigger that updates a total_orders column in the Customers table every time an order is inserted or deleted in the Orders table.
- e) Write a trigger that sets the default status of an order to 'pending' if no status is provided during the order insertion.
- f) Create a trigger that prevents the deletion of orders that have the status of 'shipped'.