**Triggers**

Two triggers have been defined to check database conditions and take appropriate actions:

* **Block After Three Attempts**: Blocks a user's account after three consecutive login failures. Implemented in the BlockAfterThreeAttempts trigger.
* **Remove From Cart After Order Placement:** Removes items from the cart after placing an order to ensure the cart remains updated. Defined in the remove\_from\_cart trigger.

USE Online\_Store\_Amazon;

ALTER TABLE customer

ADD COLUMN login\_attempts INT DEFAULT 0,

ADD COLUMN is\_blocked BOOLEAN DEFAULT 0;

CREATE TABLE LoginAttempts (

attempt\_id INT PRIMARY KEY AUTO\_INCREMENT,

username VARCHAR(50),

login\_time DATETIME,

FOREIGN KEY (username) REFERENCES Customer(username)

);

select \* from customer;

select \* from LoginAttempts;

select \* from cart;

select \* from Orders;

DELIMITER //

CREATE TRIGGER BlockAfterThreeAttempts

AFTER INSERT ON LoginAttempts

FOR EACH ROW

BEGIN

DECLARE login\_count INT;

-- Count the number of login attempts for the inserted username

SELECT COUNT(\*) INTO login\_count

FROM LoginAttempts

WHERE username = NEW.username;

-- Update login\_attempts in Customer table

UPDATE Customer

SET login\_attempts = login\_count

WHERE username = NEW.username;

-- If login attempts exceed three, update the Customer table to set is\_blocked = 1

IF login\_count > 3 THEN

UPDATE Customer

SET is\_blocked = 1

WHERE username = NEW.username;

END IF;

END //

DELIMITER ;

INSERT INTO LoginAttempts (username, login\_time) VALUES ('user1', NOW());

INSERT INTO LoginAttempts (username, login\_time) VALUES ('user1', NOW());

INSERT INTO LoginAttempts (username, login\_time) VALUES ('user1', NOW());

create trigger remove\_from\_cart after insert on orders for each row delete from cart where product\_id = new.product\_id and customer\_username = new.customer\_username;

insert into orders (order\_id, customer\_username, order\_amount, product\_id, quantity, date\_order\_placed) values (26,'user2', 300, 12, 10, current\_date());