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Tugas Pertemuan Ke-11

trigger sql

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BASIS DATA

PERTEMUAN XI

Github: <https://github.com/Rifandy232310001TeknologiInformasi/Basis_Data-Lab>

Soal nomor 1

CREATE TRIGGER update\_stock\_after\_insert

AFTER INSERT ON orderdetails

FOR EACH ROW

BEGIN

UPDATE products

SET stock = stock - NEW.quantity

WHERE product\_id = NEW.product\_id;

END;

Soal nomor 2

CREATE TRIGGER update\_stock\_after\_delete

AFTER DELETE ON orderdetails

FOR EACH ROW

BEGIN

UPDATE products

SET stock = stock + OLD.quantity

WHERE product\_id = OLD.product\_id;

END;

Soal nomor 3

CREATE TRIGGER recalculate\_order\_total

AFTER INSERT OR DELETE ON orderdetails

FOR EACH ROW

BEGIN

DECLARE new\_total DECIMAL(10, 2);

SELECT SUM(price \* quantity) INTO new\_total

FROM orderdetails

WHERE order\_id = COALESCE(NEW.order\_id, OLD.order\_id);

UPDATE orders

SET total\_amount = new\_total

WHERE order\_id = COALESCE(NEW.order\_id, OLD.order\_id);

END;

Soal nomor 4

CREATE TRIGGER validate\_payment\_method

BEFORE INSERT ON payments

FOR EACH ROW

BEGIN

IF NEW.payment\_method NOT IN ('Cash', 'Credit Card', 'Transfer') THEN

SIGNAL SQLSTATE '45000'

SET MESSAGE\_TEXT = 'Invalid payment method. Allowed methods: Cash, Credit Card, Transfer.';

END IF;

END;

Soal nomor 5

CREATE TRIGGER validate\_stock\_before\_insert

BEFORE INSERT ON orderdetails

FOR EACH ROW

BEGIN

DECLARE current\_stock INT;

SELECT stock INTO current\_stock

FROM products

WHERE product\_id = NEW.product\_id;

IF current\_stock < NEW.quantity THEN

SIGNAL SQLSTATE '45000'

SET MESSAGE\_TEXT = 'Insufficient stock for this product.';

END IF;

END;

Soal nomor 6

CREATE TRIGGER update\_last\_payment\_date

AFTER INSERT ON payments

FOR EACH ROW

BEGIN

UPDATE customers

SET last\_payment\_date = NEW.payment\_date

WHERE customer\_id = NEW.customer\_id;

END;

Soal nomor 7

CREATE TRIGGER apply\_discount\_on\_large\_order

BEFORE INSERT OR UPDATE ON orders

FOR EACH ROW

BEGIN

IF NEW.total\_amount > 1000000 THEN

SET NEW.total\_amount = NEW.total\_amount \* 0.9;

END IF;

END;