12/2/2024

BASIS DATA

PERTEMUAN XI

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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

```sql
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

```sql
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

```sql
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

```sql
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;
```