1. Trigger 1

CREATE OR REPLACE TRIGGER TEST\_TRIGGER

AFTER INSERT ON EMP

FOR EACH ROW

BEGIN

DBMS\_OUTPUT.PUT\_LINE('INSERT');

END;

1. Trigger 2

CREATE OR REPLACE TRIGGER PK\_TRIGGER

BEFORE INSERT ON EMP

FOR EACH ROW

BEGIN

:NEW.EMPNO := EMP\_PK\_SEQ.NEXTVAL;

END;

1. Trigger 3

CREATE TABLE STOCK(ITEM\_ID NUMBER(2, 0) PRIMARY KEY,QTY NUMBER(5,0))

CREATE TABLE SALE(SALE\_ID NUMBER(2, 0) PRIMARY KEY, SITEM\_ID NUMBER(2, 0), SQTY NUMBER(5,0), FOREIGN KEY (SITEM\_ID) REFERENCES STOCK(ITEM\_ID))

INSERT INTO STOCK VALUES(1,30);

INSERT INTO SALE VALUES(1,1,3);

SELECT \* FROM STOCK;

SELECT \* FROM SALE;

CREATE OR REPLACE TRIGGER INSERT\_TRIGGER

AFTER INSERT

ON SALE

FOR EACH ROW

BEGIN

UPDATE STOCK SET QTY = QTY - :NEW.SQTY WHERE ITEM\_ID = :NEW.ITEM\_ID;

END;

Advantage of package:

1. break the dependency chain.

2. support encapsulation.

3. support overloading.

4. group related functions, procedures into package, no need to recode for the same purposes.

5. code is reusable.

Disadvantage of package:

Space in memory is required for package.

Package

CREATE OR REPLACE PACKAGE SALARY AS  
FUNCTION GETSUM(A IN INT, B IN INT)  
 RETURN INT ;  
   
FUNCTION GETGREATER(A INT, B INT)  
 RETURN INT;  
END SALARY;  
  
CREATE OR REPLACE PACKAGE BODY SALARY AS  
FUNCTION GETSUM(A INT, B INT) RETURN INT   
 AS  
 BEGIN  
 RETURN (A + B);  
 END GETSUM;  
   
FUNCTION GETGREATER(A INT, B INT) RETURN INT   
AS  
C INT;  
BEGIN  
 IF A > B THEN  
 C := A;  
 ELSE  
 C := B;  
 END IF;  
 RETURN C;  
 END ISGREATER;  
END SALARY;  
  
  
SET SERVEROUTPUT ON  
DECLARE  
 RESULT INT;  
BEGIN  
 RESULT := [SALARY.GETSUM(12](https://web.wechat.com/cgi-bin/mmwebwx-bin/webwxcheckurl?requrl=http%3A%2F%2FSALARY.GETSUM(12&skey=%40crypt_9bec25ad_b50e9814dc5dc2726e64d351e4d75322&deviceid=e076973731664219&pass_ticket=Nu8VFscHbLwxtnLeoLwurscwvLtF5KJIZ607DJWbztLY52eqMcXp6HKeS8LPuZx1&opcode=2&scene=1&username=@a6544780c624edc8890868f8c58cbb1de5e353f3d89289985209c979590898b3), 18);  
 DBMS\_OUTPUT.PUT\_LINE(RESULT);  
END;