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CS275 PL/SQL

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CS275 Direct Assignment 14

**Scripts:**

CREATE OR REPLACE TYPE PRODUCT\_NESTED\_TABLE IS TABLE OF VARCHAR2(50);

CREATE TABLE SHOPPERS

(SHOPPER\_ID NUMBER(10) PRIMARY KEY,

PRODUCT\_TABLE PRODUCT\_NESTED\_TABLE)

NESTED TABLE PRODUCT\_TABLE STORE AS SHOPPER\_PRODUCTS;

INSERT INTO SHOPPERS (SHOPPER\_ID, PRODUCT\_TABLE)

VALUES (578, PRODUCT\_NESTED\_TABLE('100','4','956'));

SELECT \* FROM SHOPPERS;

CREATE OR REPLACE FUNCTION IS\_PRODUCT\_IN\_CART

(PRODUCT\_ID\_ARG IN VARCHAR2)

RETURN BOOLEAN

IS

-- GET SHOPPING DATA FROM DB

CURSOR SHOPPER\_CUR IS

SELECT \* FROM SHOPPERS;

BEGIN

-- LOOP THROUGH SHOPPING RECORDS

FOR SHOPPER\_REC IN SHOPPER\_CUR

LOOP

-- LOOP THROUGH PRODUCT RECORDS

FOR INDX IN SHOPPER\_REC.PRODUCT\_TABLE.FIRST .. SHOPPER\_REC.PRODUCT\_TABLE.LAST

LOOP

IF(SHOPPER\_REC.PRODUCT\_TABLE(INDX) = PRODUCT\_ID\_ARG) THEN

RETURN TRUE;

END IF;

END LOOP;

END LOOP;

RETURN FALSE;

END IS\_PRODUCT\_IN\_CART;

CREATE OR REPLACE FUNCTION CONVERT\_BOOL\_TO\_VARCHAR

(STATUS\_ARG IN BOOLEAN)

RETURN VARCHAR2

IS

TRUE\_STRING VARCHAR2(10) := 'TRUE';

FALSE\_STRING VARCHAR2(10) := 'FALSE';

BEGIN

IF(STATUS\_ARG = TRUE) THEN

RETURN TRUE\_STRING;

ELSE

RETURN FALSE\_STRING;

END IF;

END;

set feedback on;

set serveroutput on;

DECLARE

PRODUCT\_ID\_ONE VARCHAR2(10) := '100';

PRODUCT\_ID\_TWO VARCHAR2(10) := '300';

TEST\_ONE BOOLEAN := IS\_PRODUCT\_IN\_CART(PRODUCT\_ID\_ONE);

TEST\_TWO BOOLEAN := IS\_PRODUCT\_IN\_CART(PRODUCT\_ID\_TWO);

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Searching shopper table for product with ID of ' || PRODUCT\_ID\_ONE || ', expecting true: ' || CONVERT\_BOOL\_TO\_VARCHAR(TEST\_ONE));

DBMS\_OUTPUT.PUT\_LINE('Searching shopper table for product with ID of ' || PRODUCT\_ID\_TWO || ', expecting false: ' || CONVERT\_BOOL\_TO\_VARCHAR(TEST\_TWO));

END;

**Screenshots:**



