**ORACLE PL/SQL – Chapter 8: Handling Exceptions**

**ASSIGNMENT 8 – LESSON 8**

## Practice Questions

For questions 1-, first enter the queries, but without the commented code. Run the block and observe the error. Then add the code that was commented out, but remove the comments. Run the block again.

## Question 1: Exception TOO\_MANY\_ROWS

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**DECLARE**

**title\_rec s\_title%ROWTYPE;**

**BEGIN**

**SELECT \***

**INTO title\_rec**

**FROM s\_title;**

**/\* EXCEPTION**

**WHEN TOO\_MANY\_ROWS THEN**

**DBMS\_OUTPUT.PUT\_LINE**

**(’-- Please restrict the query result to one row --’); \*/**

**END;**

**/**

## Question 2: Exception NO\_DATA\_FOUND

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**DECLARE**

**title\_rec s\_title%ROWTYPE;**

**BEGIN**

**SELECT \***

**INTO title\_rec**

**FROM s\_title**

**WHERE title=’PRESIDENT’;**

**/\* EXCEPTION**

**WHEN NO\_DATA\_FOUND THEN**

**DBMS\_OUTPUT.PUT\_LINE**

**(’-- Please ensure that your query returns some rows --’); \*/**

**END;**

**/**

## Question 3: Exception WHEN OTHERS

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**DECLARE**

**CURSOR cust\_cursor (p\_id s\_customer.id%TYPE) IS**

**SELECT name||’ operates in city ’||city**

**FROM s\_customer**

**WHERE id = p\_id;**

**v\_customer\_msg VARCHAR2(67);**

**BEGIN**

**/\* Secondly, remove the comment below to fix the error *“invalid cursor”* \*/**

**/\* OPEN cust\_cursor(&p\_id); \*/**

**FETCH cust\_cursor**

**INTO v\_customer\_msg;**

**DBMS\_OUTPUT.PUT\_LINE(v\_customer\_msg);**

**CLOSE cust\_cursor;**

**/\* Firstly, remove only the comment below \*/**

**/\* EXCEPTION**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE(’-- Please contact your administrator --’); \*/**

**END;**

**/**

/\* Note: WHEN OTHERS must be the last exception handled! \*/

Question 4: Exception NONPREDEFINED ERROR

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When you run the block listed below (code commented out) you get the following message:

*“ORA-02292: integrity constraint (USER1.S\_ITEM\_PRODUCT\_ID\_FK) violated – child record found”*

In order to rectify the mistake, you have to trap the nonpredefined error ORA-02292 as follows:

**DECLARE**

**v\_product\_id s\_product.id%TYPE := 10011;**

**e\_childrec\_exist EXCEPTION;**

**PRAGMA EXCEPTION\_INIT**

**(e\_childrec\_exist, -2292);**

**BEGIN**

**DELETE FROM s\_product**

**WHERE id=v\_product\_id;**

**/\* EXCEPTION**

**WHEN e\_childrec\_exist THEN**

**DBMS\_OUTPUT.PUT\_LINE**

**(’Cannot delete parent record [pk] – child record [fk] exists in S\_ITEM!’);**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE(’-- Please contact your administrator --’); \*/**

**END;**

/

## Question 5: Error trapping functions

## \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Without the exception you will get the following message:

ERROR at line 1:

ORA-02292: integrity constraint (USER1.S\_ITEM\_PRODUCT\_ID\_FK) violated - child

record found

With the exception you will get the following message:

Code -2292 with message ORA-02292: integrity constraint

(USER1.S\_ITEM\_PRODUCT\_ID\_FK) violated - child record found raised

**DECLARE**

**v\_product\_id s\_product.id%TYPE := 10011;**

**v\_error\_code NUMBER;**

**v\_error\_msg VARCHAR2(255);**

**BEGIN**

**DELETE FROM s\_product**

**WHERE id=v\_product\_id;**

**/\* EXCEPTION**

**WHEN OTHERS THEN**

**v\_error\_code := SQLCODE;**

**v\_error\_msg := SQLERRM;**

**DBMS\_OUTPUT.PUT\_LINE( ’Code ’||v\_error\_code||’ with message ’||**

**v\_error\_msg||’ raised’); \*/**

**END;**

/

## Question 6: User-Defined Exceptions

## \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**DECLARE**

**v\_product\_id s\_product.id%TYPE := 12345;**

**e\_no\_such\_product\_id EXCEPTION;**

**BEGIN**

**DELETE FROM s\_product**

**WHERE id=v\_product\_id;**

**IF SQL%NOTFOUND THEN**

**RAISE e\_no\_such\_product\_id;**

**END IF;**

**EXCEPTION**

**WHEN e\_no\_such\_product\_id THEN**

**DBMS\_OUTPUT.PUT\_LINE(’-- PRODUCT\_ID ’||v\_product\_id||’ not found!!! --’);**

**END;**

/

## Question 7: RAISE\_APPLICATION\_ERROR

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/\* This is an example to be used in a stored procedure (See Lesson 9) \*/

**DECLARE**

**v\_product\_id s\_product.id%TYPE := 12345;**

**e\_no\_such\_product\_id EXCEPTION;**

**BEGIN**

**DELETE FROM s\_product**

**WHERE id=v\_product\_id;**

**IF SQL%NOTFOUND THEN**

**RAISE\_APPLICATION\_ERROR (-2292, ’Cannot delete parent!’);**

**END IF;**

**EXCEPTION**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE(--Please contact system administrator --’);**

**END;**

/