**Quiz**

You can trap any error by including a corresponding handler within the exception-handling section of the PL/SQL block.

1. True

2. False

**Answer: True (Lecture: page 7)**

**Practice 8-1: Handling Predefined Exceptions**

**In this practice, you write a PL/SQL block that applies a predefined exception in order to process only one record at a time. The PL/SQL block selects the name of the employee with a given salary value.**

1)  Execute the command in the lab\_05\_01.sql file to re-create the messages table.

**DROP TABLE messages;**

**CREATE TABLE messages(**

**results VARCHAR2(80)**

**);**

2)  In the declarative section, declare two variables: v\_ename of type employees.last\_name and v\_emp\_sal of type employees.salary. Initialize the latter to 6000.

**DECLARE**

**v\_ename employees.last\_name%TYPE;**

**v\_emp\_sal employees.salary%TYPE := 6000;**

3)  In the executable section, retrieve the last names of employees whose salaries are equal to the value in v\_emp\_sal. If the salary entered returns only one row, insert into the messages table the employee’s name and the salary amount.  
Note: Do not use explicit cursors.

**BEGIN**

**SELECT last\_name INTO v\_ename**

**FROM employees**

**WHERE salary = v\_emp\_sal;**

**INSERT INTO messages(results)**

**VALUES(v\_ename || ' ' || v\_emp\_sal);**

4)  If the salary entered does not return any rows, handle the exception withan appropriate exception handler and insert into the messages table the message “No employee with a salary of <salary>.”

**EXCEPTION**

**WHEN NO\_DATA\_FOUND THEN**

**INSERT INTO messages(results)**

**VALUES('No employee with a salary of ' || v\_emp\_sal);**

5)  If the salary entered returns multiple rows, handle the exception with an appropriate exception handler and insert into the messages table the message “More than one employee with a salary of <salary>.”

**WHEN TOO\_MANY\_ROWS THEN**

**INSERT INTO messages(results)**

**VALUES('More than one employee with a salary of ' || v\_emp\_sal);**

6)  Handle any other exception with an appropriate exception handler and insert into the messages table the message “Some other error occurred.”

**WHEN OTHERS THEN**

**INSERT INTO messages(results)**

**VALUES('Some other error occurred.');**

7)  Display the rows from the messages table to check whether the PL/SQL block has executed successfully. The output is as follows:

**END;**

**/**

**SELECT\*FROM messages;**

Изображение выглядит как стол

Автоматически созданное описание

Изображение выглядит как текст

Автоматически созданное описание

8) Change the initialized value of v\_emp\_sal to 2000 and re-execute. Output is as follows:

Изображение выглядит как стол

Автоматически созданное описание

Изображение выглядит как текст

Автоматически созданное описание

**Practice 8-2: Handling Standard Oracle Server Exceptions**

**In this practice, you write a PL/SQL block that declares an exception for the Oracle Server error ORA-02292 (integrity constraint violated – child record found). The block tests for the exception and outputs the error message.**

1)  In the declarative section, declare an exception e\_childrecord\_exists. Associate the declared exception with the standard Oracle Server error - 02292.

**DECLARE**

**e\_childrecord\_exists EXCEPTION;**

**PRAGMA EXCEPTION\_INIT(e\_childrecord\_exists, -02292);**

2)  In the executable section, display “Deleting department 40....” Include a DELETE statement to delete the department with the department\_id 40.

**BEGIN**

**DBMS\_OUTPUT.PUT\_LINE(' Deleting department 40....');**

**DELETE FROM departments WHERE department\_id = 40;**

3)  Include an exception section to handle the e\_childrecord\_exists exception and display the appropriate message.

**EXCEPTION**

**WHEN e\_childrecord\_exists THEN**

**DBMS\_OUTPUT.PUT\_LINE('Cannot delete this department. There are employees in this department (child records exist.)');**

The sample output is as follows:

Изображение выглядит как текст

Автоматически созданное описаниеИзображение выглядит как текст

Автоматически созданное описание