Chapter 4 – Review Questions

1. Which of the following do you use to check the number of rows affected by an UPDATE statement?
   1. SQL%FOUND
   2. SQL%NOTFOUND
   3. SQL%COUNT
   4. SQL%ROWCOUNT
2. The FOR UPDATE clause in a cursor declaration instructs the system to do which of the following?
   1. Execute the cursor
   2. Issue and SQL UPDATE statement
   3. Keep track of the physical database row related to each cursor row
   4. Allow transaction control statements
3. Which symbol is used to indicate a single-line comment in PL/SQL code? The ‘--‘ symbol or hyphen-hyphen.
4. The PRAGMA EXCEPTION\_INIT statement performs what task?
   1. It associates an Oracle error number with an exception name.
   2. It associates a user-defined error with an exception name.
   3. It associates a predefined exception name with an Oracle error.
   4. It raises an error in a block’s executable section.
5. Which type of exception must use a RAISE command? A user-defined exception uses the RAISE command in a block of code to enforce a business rule. The exception must be raised in the executable section by using the RAISE COMMAND. A declared exception must be referred to in the RAISE statement, or a PL/SQL occurs.
6. What happens to program execution first when an error is raised in the executable section?
   1. It moves to the EXCEPTION section of that block
   2. It moves to the enclosing block’s EXCEPTION section.
   3. It propagates to the application environment.
   4. None of the above.
7. Which characters indicate the start and end of a multiline comment in PL/SQL Code? The ‘/\*’ signifies the start of a comment section and ‘\*’ signifies the end of a comment section.
8. Which of the following should be used to manage a query that returns multiple rows?
   1. Implicit cursor
   2. Explicit cursor
   3. Record variable
   4. Table variable
9. Which of the following is used to hold each row processed from a cursor?
   1. Scalar variable
   2. Record variable
   3. Table variable
   4. None of the above
10. What cursor action retrieves the next row from a cursor?
    1. FETCH
    2. GET
    3. OPEN
    4. READ
11. Describe the differences between implicit an explicit cursors. When an SQL statement is executed, the Oracle server creates an implicit cursor automatically. Implicit cursors are declared automatically for all DML. Explicit cursors are declared manipulated in PL/SQL code for handling rows returned by a SELECT statement. In addition, cursor variables are references or pointers to a work area.
12. Describe how a CURSOR FOR loop makes cursor processing easier. A CURSOR FOR loop is another form of coding an explicit cursor that helps you avoid cursor errors in your programs. It simplifies coding because it handles many explicit cursor actions automatically, such as creating a record variable, opening a cursor, looping through one row at a time until the last row is retrieved from the cursor, and closing the cursor.
13. Explain the purpose of exception handlers. An exception handler is a mechanism for trapping an error that occurs in processing. Its code handles the error in a user-friendly manner and allows the application to continue. The EXCEPTION section of a block begins with the EXCEPTION keyword and follows the BEGIN section.
14. Explain how to incorporate a user-defined exception in block.
    1. First, declare an exception
    2. Second, specify when to raise this error in the executable section.
    3. Third, code an exception handler.

DECLARE

ex\_prod\_update EXCEPTION; --Declare an exception name

BEGIN

UPDATE bb\_product

SET description = 'Mill grinder with 5 grind settings'

WHERE idproduct = 30;

IF SQL%NOTFOUND THEN --If no rows are updated, raise the exception

RAISE ex\_prod\_update;

END IF;

EXCEPTION

WHEN ex\_prod\_update THEN -- Establish an exception handler

DBMS\_OUTPUT.PUT\_LINE ('Invalid product ID entered');

END;

1. Describe the two types of exception handlers for managing Oracle errors. The EXCEPTION section addresses two situations: An Oracle error has been raised, or a user-defined error has been raised. Oracle supplies predefined exceptions , which are names associated with common errors. They’re declared in the STANDARD package, which makes them globally available on the system. If an exception handler is needed for an Oracle error that doesn’t have a predefined exception then you need to declare an exception and associate an Oracle error number with it.

Advanced Review Questions

1. In a CURSOR FOR loop, which command is used to open the cursor?
   1. FETCH
   2. OPEN
   3. FOR loop
   4. The cursor is opened automatically by a CURSOR FOR loop.
2. Which of the following is not true for CURSOR FOR loop.
   1. A record variable must be declared to hold a cursor row.
   2. Fetching rows is handled automatically by the loop.
   3. Opening the cursor is handled automatically by the loop.
   4. No exit condition is needed to end the looping action.
3. An Oracle PRAGMA statement does which of the following?
   1. Associates an Oracle error with an exception name
   2. Provides the additional instructions to be used when the code runs.
   3. Forces the code to not compile until runtime
   4. Creates Oracle predefined exceptions
4. Review the following block. What type of exception handler is ex\_limit\_hit

DECLARE

lv\_amt\_num NUMBER(7,2);

ex\_limit\_hit EXCEPTION;

BEGIN

SELECT amount

INTO lv\_amt\_num

FROM customer

WHERE cust\_no = g\_cust;

IF lv\_amt\_num > 1000 THEN

RAISE ex\_limit\_hit;

END IF;

EXCEPTION

WHEN ex\_limit\_hit THEN

DBMS\_OUTPUT.PUT\_LINE(‘Limit Exceeded’);

END;

* 1. Predefined Oracle
  2. Undefined Oracle
  3. User defined
  4. PRAGMA

1. Which of the following is a valid predefined exception in Oracle?
   1. DATA\_NOT\_FOUND
   2. TOO\_MANY\_ROWS
   3. NO\_CASE\_FOUND
   4. ZERO\_DIVISION