Midterm 2 CS514

Sample

1. Consider

VAR g\_x NUMBER

DECLARE

y VARCHAR2(6);

z empbb02.sal%TYPE;

BEGIN

y := 'MOE';

z := &w;

% \*\*\*\*\*\*\*\*\*\*\*\*

END

(a) Identify from the code above each of

(i) bind variable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(ii) block variable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(iii) substitution variable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) Write a line of code which, when it replaces the comment, will set g\_x equal to 17

(c) Write code which, placed at the end of the block, will output the values of y and z, placing between them the word ‘EARNS’. Show any other requisite code for doing this

(d) Write code which, placed after the block, will display the g\_x.

3. A cursor, implicit or explicit, has 4 attributes, two of which are %FOUND, %NOTFOUND. The other two are…

1)

2)

4. How is Class.forName() used in jdbc, i.e. what purpose does it serve?

5. What is the PL/SQL value of TRUE AND NULL

6. Some parameters need to be 'registered' in jdbc when accessing stored function and procedures. Which one, and why?

7. Explain ROLLBACK for a transaction. What does it do?

10. Write a PL/SQL block as follows:

(a) Declare an explicit cursor whose active set will be department names and mottos, from deptbb02

(b) Create code which will include a no-frills loop (contains a 'fetch') that creates the active set of the cursor, and displays its contents

SET SERVEROUTPUT ON

DECLARE

tname deptbb02.dname%TYPE;

tmotto deptbb02.motto%TYPE;

Cursor mycursor IS select dname, motto from deptbb02;

BEGIN

OPEN mycursor;

LOOP

FETCH mycursor INTO tname, tmotto;

EXIT WHEN mycursor%NOTFOUND;

dbms\_output.put\_line(tname || ' ' || tmotto);

END LOOP;

CLOSE mycursor;

END;

14. JDBC

(a) In class, the driver recommended for jdbc connections to Oracle was…

(b) To connect jdbc to one of Microsoft DBMS's you would use the driver whose name is (approximate name ok) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(c) To obtain 'data dictionary' style information about the data results you have brought back from a database using jdbc you would create an object of class \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, whereas to obtain similar info about the Oracle schema you retrieved the data from you would create an object of type \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2) 16. After you bring back an Oracle string value using jdbc, its type will not be VARCHAR2 in Java.

What type will it be?

How will you 'convert' it to a string?

17. Assume a PreparedStatement pstmt is created with the parameter

"INSERT INTO deptbb02 VALUES(?,?,?,?,?)".

Indicate how the second question mark can be assigned a reasonable value (you need not present an interactive method)

18. Very briefly describe the syntax REF CURSOR as used in PL/SQL

19. The EXCEPTION code in PL/SQL involves 3 kinds of errors. Briefly describe and illustrate each of these 3 kinds of errors. Hint: one kind is "user-defined"