Vendor: IBM

Exam Code: 000-545

Exam Name: DB2 9.7 SQL Procedure Developer

Version: Demo

Question No : 1

A developer needs to create a user-defined function that will return a list of employees who work in a particular department. Which statement will successfully create a function that meets this objective?

```
A. CREATE FUNCTION dept_employees (deptno CHAR(3))
RETURNS TABLE
LANGUAGE SQL
READS SQL DATA
RETURN
SELECT empno, lastname AS l_name, firstnme AS f_name
FROM employee
WHERE employee.workdept = dept_employees.deptno
```

```
B. CREATE FUNCTION dept_employees (deptno CHAR(3))
RETURNS TABLE
DYNAMIC RESULT SETS 1
LANGUAGE SQL
READS SQL DATA
DECLARE emp_info CURSOR WITH RETURN FOR
SELECT empno, lastname AS l_name, firstnme AS f_name
FROM employee
WHERE employee.workdept = dept_employees.deptno
OPEN emp_info;
RETURN
```

```
C. CREATE FUNCTION dept_employees (deptno CHAR(3))
RETURNS TABLE (empno CHAR(6),
l_name VARCHAR(15),
f_name VARCHAR(12))
LANGUAGE SQL
READS SQL DATA
RETURN
SELECT empno, lastname AS l_name, firstnme AS f_name
FROM employee
WHERE employee.workdept = dept_employees.deptno
```

```
D. CREATE FUNCTION dept_employees (deptno CHAR(3))
RETURNS TABLE (empno CHAR(6),
l_name VARCHAR(15),
f_name VARCHAR(12))
DYNAMIC RESULT SETS 1
LANGUAGE SQL
READS SQL DATA
DECLARE emp_info CURSOR WITH RETURN FOR
SELECT empno, lastname AS l_name, firstnme AS f_name
FROM employee
```

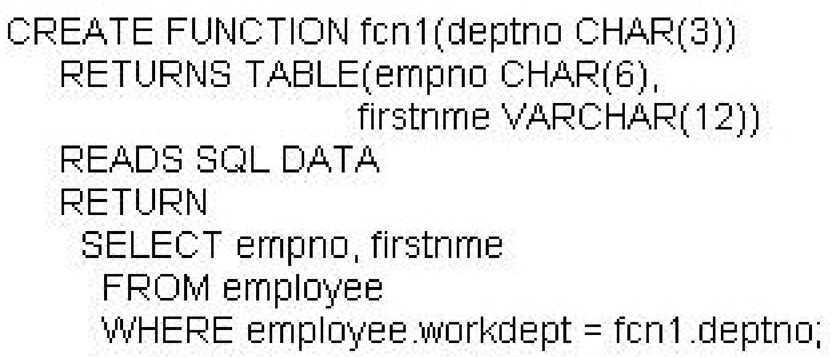
WHERE employee.workdept = dept_employees.deptno
OPEN emp_info;
RETURN

Answer: C

Explanation:

Question No : 2

In the function shown below:



```
CREATE FUNCTION fcn1(deptno CHAR(3))
    RETURNS TABLE(empno CHAR(6),
                            firstnme VARCHAR(12))
    READS SQL DATA
    RETURN
      SELECT empno, firstnme
        FROM employee
        WHERE employee.workdept = fcn1.deptno;
```

Which statement can be used to invoke the function above?

A. SELECT * FROM TABLE(fcn1('B01'))
B. SELECT TABLE(fcn1('B01')) FROM SYSIBM.SYSDUMMY1
C. SELECT * FROM fcn1('B01')
D. SELECT fcn1('B01') FROM SYSIBM.SYSDUMMY1

Answer: A

Explanation:

Question No : 3

Which statement correctly describes characteristics of external functions?

A. External functions cannot return tables.
B. All cursors opened within an external function should stay open until the database is quiesced.

C. Scratchpads can be used to allocate dynamic memory required for multiple function invocations.
D. Transactions can be terminated within external functions.

Answer: C

Explanation:

Question No : 4

Click the Exhibit button.

Referring to the exhibit, how many rows will be returned by the SQL query shown below? SELECT * FROM TABLE(getnumemployee(21?) AS dSELECT * FROM TABLE(getnumemployee(?21?) AS d

A. 0
B. 1
C. 7
D. 10

Answer: C

Explanation:

Question No : 5

Which three optional clauses can be used when creating an external function? (Choose three.)

A. SCRATCHPAD
B. NOTEPAD
C. LANGUAGE
D. EXTERNAL NAME
E. DATABASEINFO

Answer: A,C,D

Explanation:

Question No : 6

Which statement is permitted within a scalar user-defined function body?

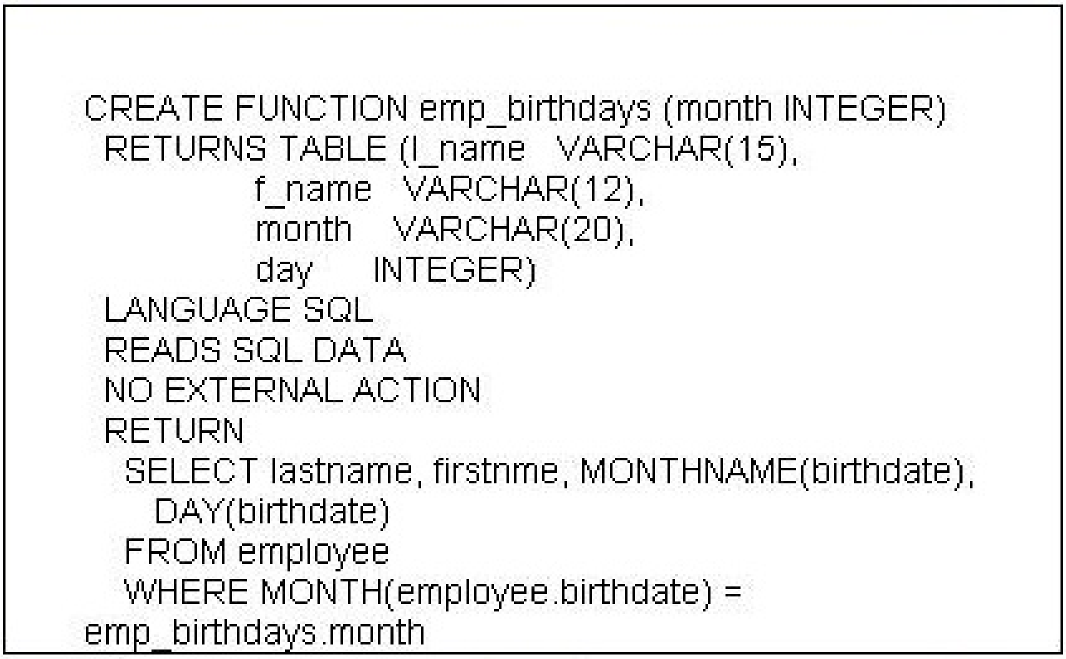
A. COMMIT
B. INSERT
C. SIGNAL
D. LOOP

Answer: C

Explanation:

Question No : 7

Click the Exhibit button.



```
CREATE FUNCTION emp_birthdays (month INTEGER)
  RETURNS TABLE (l_name   VARCHAR(15),
                f_name   VARCHAR(12),
                month    VARCHAR(20),
                day      INTEGER)
  LANGUAGE SQL
  READS SQL DATA
  NO EXTERNAL ACTION
  RETURN
    SELECT lastname, firstnme, MONTHNAME(birthdate),
       DAY(birthdate)
    FROM employee
    WHERE MONTH(employee.birthdate) =
emp_birthdays.month
```

A user-defined function was created using the statement shown in the exhibit. Which additional option can be added to the CREATE FUNCTION statement to tell the optimizer that the function does not always return the same results for a given argument value?

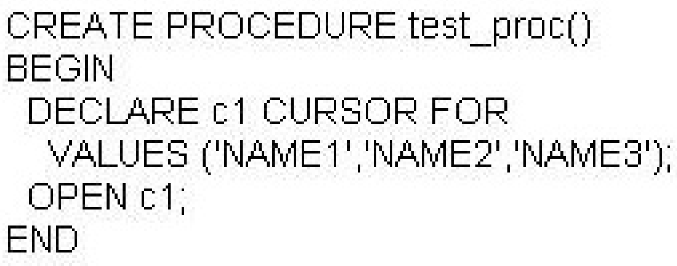
A. NO EXTERNAL ACTION
B. NOT FENCED
C. NOT DETERMINISTIC
D. STATIC DISPATCH

Answer: C

Explanation:

Question No : 8

Given the following SQL:



```
CREATE PROCEDURE test_proc()
BEGIN
  DECLARE c1 CURSOR FOR
    VALUES ('NAME1','NAME2','NAME3');
  OPEN c1;
END
```

Which statement is incorrect?

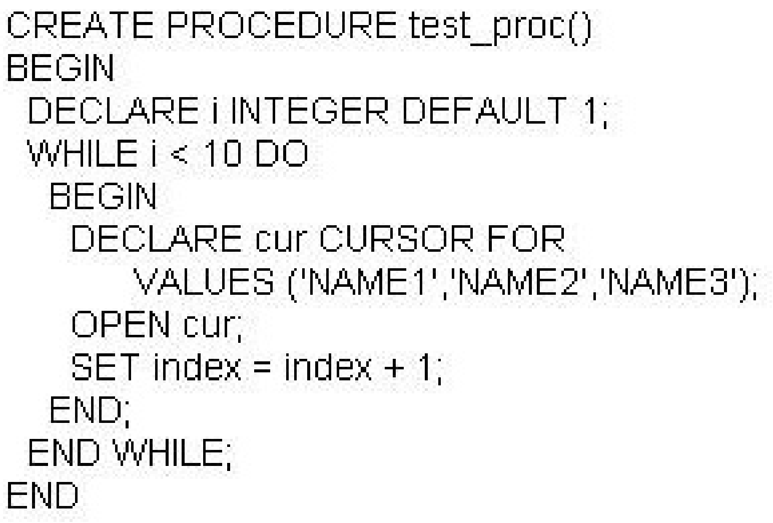
A. The procedure declaration requires the DYNAMIC RESULT SETS 1 clause in order to return a result set.
B. The cursor declaration requires the WITH RETURN TO CLIENT clause in order to return a result set.
C. The cursor declaration requires the WITH RETURN TO CALLER clause in order to return a result set.
D. The cursor declaration requires the WITH RETURN clause in order to return a result set.

Answer: A

Explanation:

Question No : 9

Given the following SQL:



```
CREATE PROCEDURE test_proc()
BEGIN
  DECLARE i INTEGER DEFAULT 1;
  WHILE i < 10 DO
    BEGIN
      DECLARE cur CURSOR FOR
            VALUES ('NAME1','NAME2','NAME3');
      OPEN cur;
      SET index = index + 1;
    END;
  END WHILE;
END
```

Which of the following statements is true?

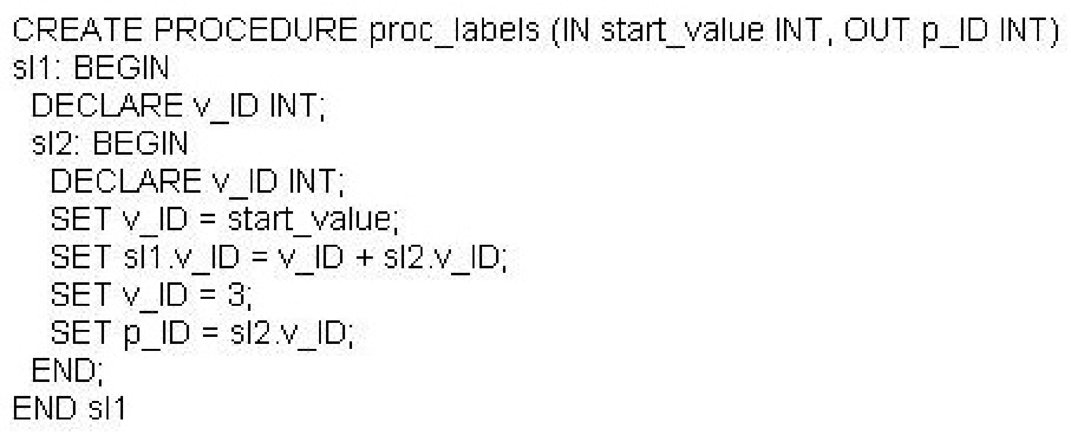
A. The procedure declaration requires the DYNAMIC RESULT SETS 1 clause in order to return a result set.
B. The cursor declaration requires WITH RETURN TO CLIENT clause in order to return a result set.
C. The cursor declaration requires WITH RETURN TO CALLER clause in order to return a result set.
D. The cursor declaration requires WITH RETURN clause in order to return a result set.

Answer: B

Explanation:

Question No : 10

In the stored procedure below:



```
CREATE PROCEDURE proc_labels (IN start_value INT, OUT p_ID INT)
sl1: BEGIN
  DECLARE v_ID INT;
  sl2: BEGIN
    DECLARE v_ID INT;
    SET v_ID = start_value;
    SET sl1.v_ID = v_ID + sl2.v_ID;
    SET v_ID = 3;
    SET p_ID = sl2.v_ID;
  END;
END sl1
```

What will the value of the P_ID parameter be if the procedure is invoked and a value of 2 is specified for the START_VALUE parameter?

A. 1
B. 2
C. 3
D. 4

Answer: C

Explanation:

Question No : 11

Which procedure demonstrates the correct use of dynamic SQL?

A.
```
CREATE PROCEDURE update_count1 (IN new_count INTEGER, IN item_code INTEGER)
BEGIN
DECLARE v_dynSQL VARCHAR(200);
SET v_dynSQL = 'UPDATE stock SET quantity_on_hand=? WHERE item_number=?';
PREPARE v_stmt1 FROM v_dynSQL;
EXECUTE v_stmt1 USING new_count, item_code;
END
```

B.
```
CREATE PROCEDURE update_count2 (IN tab_name VARCHAR(128), IN new_count INTEGER, IN item_code INTEGER)
BEGIN
DECLARE v_dynSQL VARCHAR(200);
SET v_dynSQL = 'UPDATE ? SET quantity_on_hand=? WHERE item_number=?';
PREPARE v_stmt1 FROM v_dynSQL;
EXECUTE v_stmt1 USING tab_name, new_count, item_code;
END
```

C.
```
CREATE PROCEDURE update_count4 (IN tab_name VARCHAR(128), IN col_name1 VARCHAR(128), IN col_name2 VARCHAR(128), IN
new_count INTEGER, IN item_code INTEGER)
BEGIN
DECLARE v_dynSQL VARCHAR(200);
SET v_dynSQL = 'UPDATE ? SET ?=? WHERE ?=?';
PREPARE v_stmt1 FROM v_dynSQL;
EXECUTE v_stmt1 USING tab_name, col_name1, new_count, col_name2, item_code;
END
```

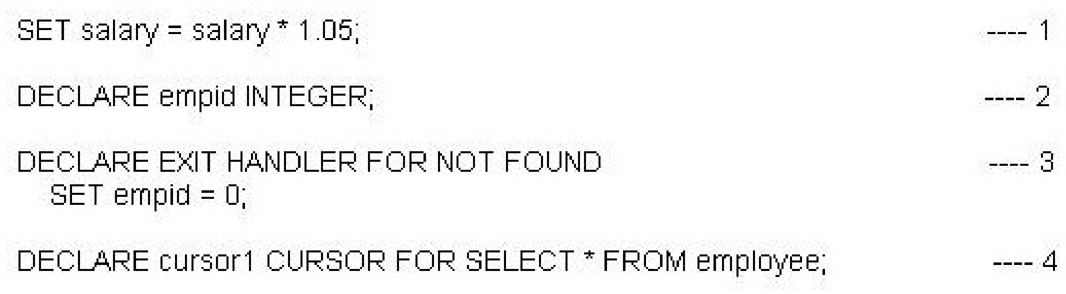
D.
```
CREATE PROCEDURE update_count5 (IN new_count INTEGER, IN item_code INTEGER)
BEGIN
DECLARE v_dynSQL VARCHAR(200);
DECLARE v_col_name VARCHAR(128);
SET v_col_name = 'item_number';
SET v_dynSQL = 'UPDATE stock SET quantity_on_hand=? WHERE ?=?';
PREPARE v_stmt1 FROM v_dynSQL;
EXECUTE v_stmt1 USING new_count, v_col_name, item_code;
END
```

Answer: A

Explanation:

Question No : 12

A developer wants to code the following statements in an SQL procedure:



```
SET salary = salary * 1.05;                                    ---- 1

DECLARE empid INTEGER;                                         ---- 2

DECLARE EXIT HANDLER FOR NOT FOUND                             ---- 3
   SET empid = 0;

DECLARE cursor1 CURSOR FOR SELECT * FROM employee;             ---- 4
```

What order must these statements be coded in?

A. 1, 2, 3, 4
B. 2, 4, 3, 1
C. 3, 4, 2, 1
D. 4, 3, 2, 1

Answer: B

Explanation:

Question No : 13

What is a reason to use SQL procedures in DB2?

A. to use different programming languages
B. to reduce code sharing
C. to move business logic rules into the database
D. to eliminate the need for testing

Answer: C

Explanation:

Question No : 14

Which SQL procedure declaration is coded correctly?

A. CREATE PROCEDURE myproc(IN salary DOUBLE, OUT commission DOUBLE)

```
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
SET commission = 0;
DECLARE my_cur CURSOR FOR SELECT * FROM employee;
DECLARE a DOUBLE;
SET a = .06 * salary;
SET commission = a;
END
```

B.
```
CREATE PROCEDURE myproc(IN salary DOUBLE, OUT commission DOUBLE)
BEGIN
DECLARE EXIT HANDLER FOR SQLEXCEPTION
SET commission = 0;
DECLARE a DOUBLE;
DECLARE my_cur CURSOR FOR SELECT * FROM employee;
SET a = .06 * salary;
SET commission = a;
END
```

C.
```
CREATE PROCEDURE myproc(IN salary DOUBLE, OUT commission DOUBLE)
BEGIN
DECLARE a DOUBLE;
DECLARE EXIT HANDLER FOR SQLEXCEPTION
SET commission = 0;
DECLARE my_cur CURSOR FOR SELECT * FROM employee;
SET a = .06 * salary;
SET commission = a;
END
```

D.
```
CREATE PROCEDURE myproc(IN salary DOUBLE, OUT commission DOUBLE)
BEGIN
DECLARE a DOUBLE;
DECLARE my_cur CURSOR FOR SELECT * FROM employee;
DECLARE EXIT HANDLER FOR SQLEXCEPTION
SET commission = 0;
SET a = .06 * salary;
SET commission = a;
END
```

Answer: D

Explanation:

Question No : 15

The CREATE PROCEDURE statement shown below was executed against a database called MYDB.

CREATE PROCEDURE myschema.proc1(IN p1 INTEGER, OUT p2 CHAR(4), OUT p3 SMALLINT)

BEGIN

SET p2 = 'abc';

END

Which two CREATE PROCEDURE statements, when executed against the same database, will succeed? (Choose two.)

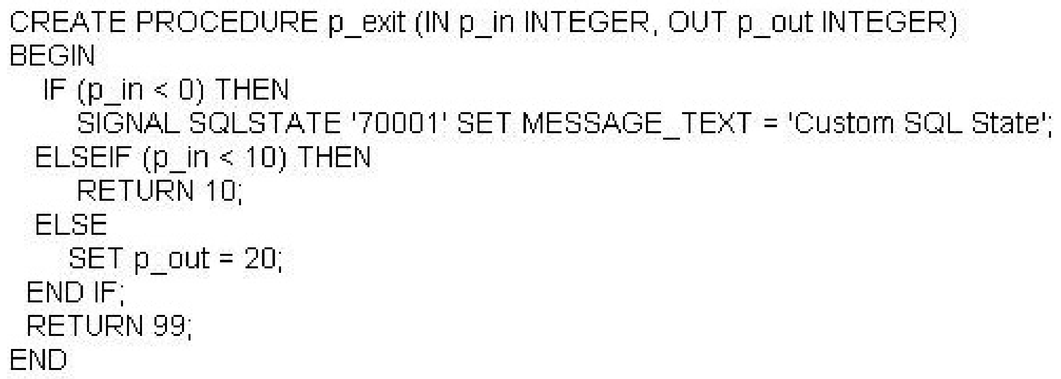
A. CREATE PROCEDURE myschema.proc1(IN p1 CHAR(4), OUT p2 INTEGER)
BEGIN
SET p2 = 123;
END
B. CREATE PROCEDURE myschema.proc1(IN p1 INTEGER, OUT p2 CHAR(4), OUT p3 CHAR(4))
BEGIN
SET p2 = 'abc';
END
C. CREATE PROCEDURE myschema.proc1(IN p1 CHAR(4), OUT p2 INTEGER, OUT p3 SMALLINT)
BEGIN
SET p2 = 123;
END
D. CREATE PROCEDURE otherschema.proc1(IN p1 CHAR(4), OUT p2 CHAR(4), OUT p3 CHAR(4))
BEGIN
SET p2 = 'abc';
END
E. CREATE PROCEDURE myschema.proc1(IN p1 NUMBER, OUT p2 NUMBER, OUT p3 NUMBER)
BEGIN
SET p2 = 'abc';
END

Answer: A,D

Explanation:

Question No : 16

If this statement was used to create an SQL procedure named P_EXIT:



```
CREATE PROCEDURE p_exit (IN p_in INTEGER, OUT p_out INTEGER)
BEGIN
    IF (p_in < 0) THEN
        SIGNAL SQLSTATE '70001' SET MESSAGE_TEXT = 'Custom SQL State';
   ELSEIF (p_in < 10) THEN
        RETURN 10;
   ELSE
       SET p_out = 20;
  END IF;
  RETURN 99;
END
```

What will the return status be?

A. 10
B. 20
C. 99
D. NULL

Answer: C

Explanation:

Question No : 17

The CREATE OR REPLACE PROCEDURE statement is similar semantically to which of the following combined statements?

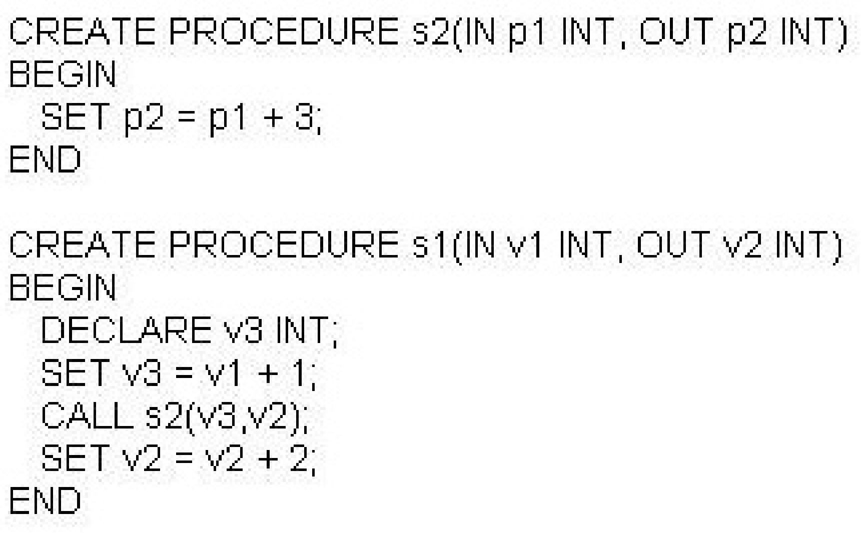
A. DROP and CREATE PROCEDURE
B. ALTER and CREATE PROCEDURE
C. UPDATE and CREATE PROCEDURE
D. DROP and ALTER PROCEDURE

Answer: A

Explanation:

Question No : 18

Given the two SQL procedures shown below:



```
CREATE PROCEDURE s2(IN p1 INT, OUT p2 INT)
BEGIN
   SET p2 = p1 + 3;
END

CREATE PROCEDURE s1(IN v1 INT, OUT v2 INT)
BEGIN
   DECLARE v3 INT;
   SET v3 = v1 + 1;
   CALL s2(v3,v2);
   SET v2 = v2 + 2;
END
```

What is the expected output if procedure S1 is invoked with the value 1 provided for parameter V1?

A. NULL
B. 2
C. 5
D. 7

Answer: D

Explanation:

Question No : 19

Which CREATE PROCEDURE statement option should be used if you plan on issuing a DECLARE GLOBAL TEMPORARY TABLE statement from within the SQL procedure body?

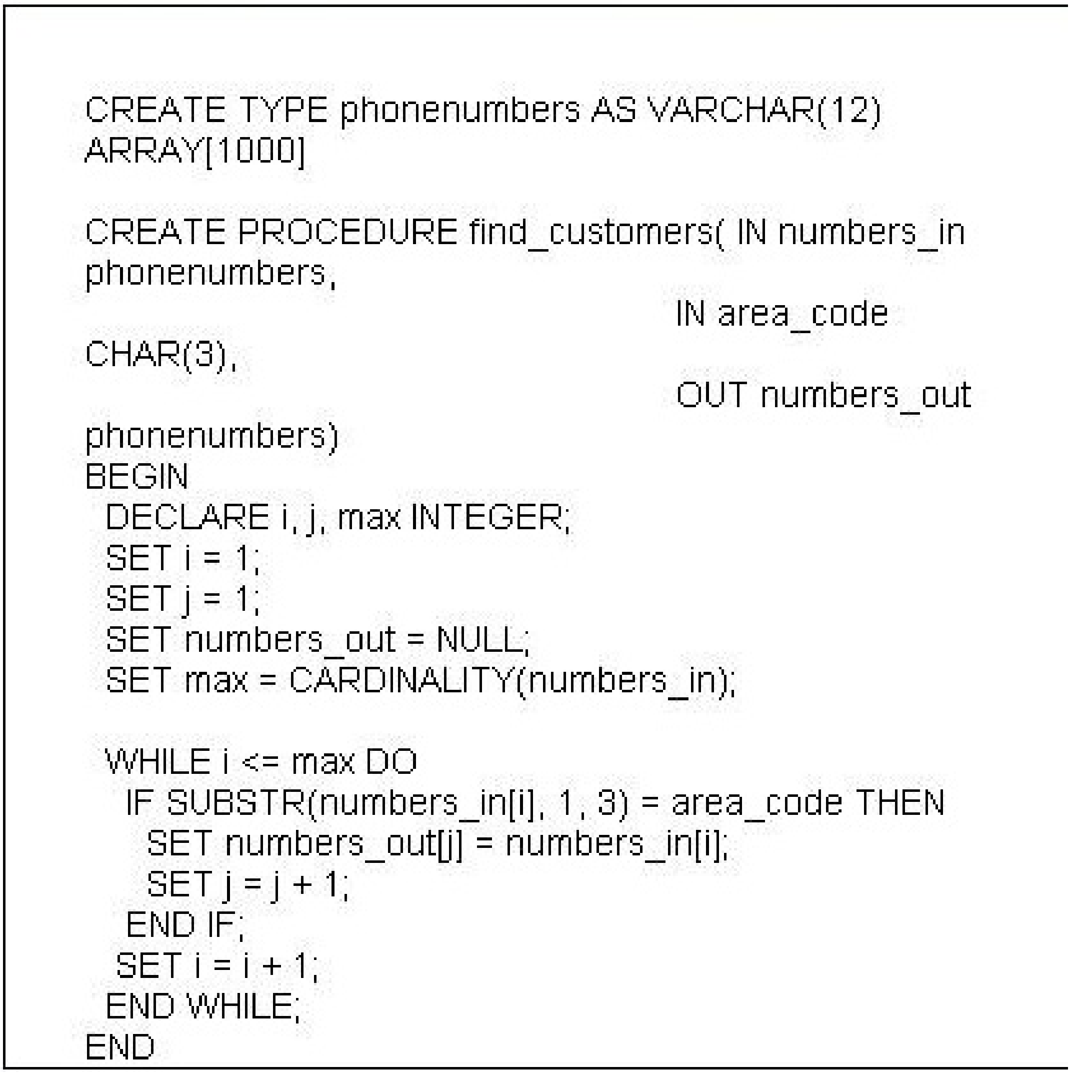
A. CONTAINS SQL
B. READS SQL DATA
C. MODIFIES SQL DATA
D. LANGUAGE SQL

Answer: C

Explanation:

Question No : 20

Click on the Exhibit button.



```
CREATE TYPE phonenumbers AS VARCHAR(12)
ARRAY[1000]

CREATE PROCEDURE find_customers( IN numbers_in
phonenumbers,
                                             IN area_code
CHAR(3),
                                             OUT numbers_out
phonenumbers)
BEGIN
  DECLARE i, j, max INTEGER;
  SET i = 1;
  SET j = 1;
  SET numbers_out = NULL;
  SET max = CARDINALITY(numbers_in);

  WHILE i <= max DO
    IF SUBSTR(numbers_in[i], 1, 3) = area_code THEN
      SET numbers_out[j] = numbers_in[i];
      SET j = j + 1;
    END IF;
   SET i = i + 1;
  END WHILE;
END
```

Referring to the exhibit, what is the OUT_PHONENUMBERS result set when the SQL procedure is invoked by the call statement shown below?

CALL find_customers(ARRAY[?16-305-3745?

?05-416-4565?

?16-305-3746?

'905-414-4566'],

?16??)

A. [?16-305-3745??05-416-4565? ?16-305-3746']
B. [?16-305-3745??05-416-4565? ?16-305-3746? '905-414-4566']
C. [?05-416-4565? '905-414-4566']
D. [?16-305-3745? ?16-305-3746[?16-305-3745? ?16-305-3746?

Answer: D

Explanation:

Question No : 21

Which two statements are true with regards to nesting SQL procedures? (Choose two.)

A. An SQL procedure cannot invoke procedures built in other languages (e.g., C, Java).
B. An SQL procedure can invoke the same SQL procedure more than once.
C. An SQL procedure defined with the CONTAINS SQL clause can invoke an SQL procedure defined with the READS SQL DATA clause.
D. An SQL procedure defined with the CONTAINS SQL clause can invoke an SQL procedure defined with the MODIFIES SQL DATA clause.
E. An SQL procedure defined with the CONTAINS SQL clause can invoke an SQL procedure defined with the NO SQL clause.

Answer: B,E

Explanation:

Question No : 22

Which statement can be used to define variable that can be shared between procedures?

A. DECLARE my_gl_var INTEGER DEFAULT 1
B. CREATE OR REPLACE VARIABLE my_gl_var INTEGER
C. DEFINE GLOBAL VARIABLE my_gl_var INTEGER
D. CREATE GLOBAL VARIABLE my_gl_var

Answer: B

Explanation:

Question No : 23

In which type of table space must global temporary tables be created?

A. REGULAR
B. LONG
C. SYSTEM TEMPORARY
D. USER TEMPORARY

Answer: D
Explanation:

Question No : 24

Which statement is true about the data types VARCHAR and VARCHAR2?

A. The VARCHAR data type cannot be used with a database that has been created in Oracle compatibility mode.
B. The VARCHAR2 data type treats empty strings as null; the VARCHAR data type treats empty strings as not null with zero length.
C. The VARCHAR2 data type length is limited to 2000 bytes; the VARCHAR data type length can be up to 32K.
D. The VARCHAR2 data type cannot be used in a database that has not been created in Oracle compatibility mode.

Answer: B
Explanation:

Question No : 25

Which statement can be used to define an array of 30 names that have a maximum size of 25 characters each?

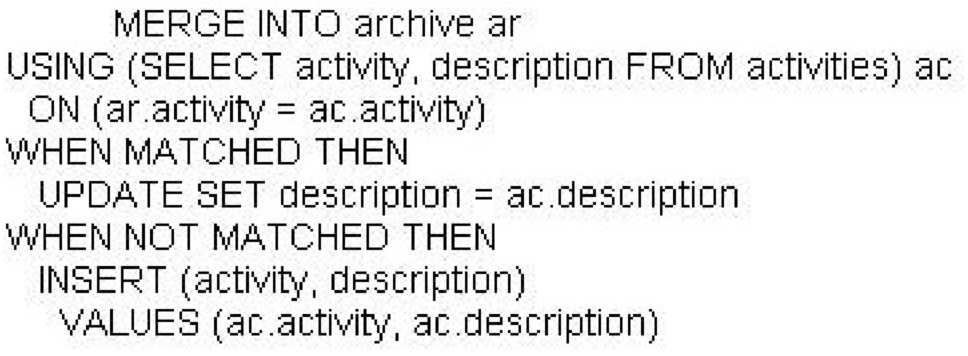
A. CREATE TYPE names AS VARCHAR(25) ARRAY[30];
B. CREATE ARRAY names[30] VARCHAR(25);
C. CREATE TYPE names[30] VARCHAR(25);
D. CREATE ARRAY names AS VARCHAR(25);

Answer: A

Explanation:

Question No : 26

In the code segment shown below:



```
          MERGE INTO archive ar
USING (SELECT activity, description FROM activities) ac
  ON (ar.activity = ac.activity)
WHEN MATCHED THEN
   UPDATE SET description = ac.description
WHEN NOT MATCHED THEN
   INSERT (activity, description)
     VALUES (ac.activity, ac.description)
```

Which statement accurately describes the result?

A. For activities whose description has not changed, update the description in the ARCHIVE table. For new activities, insert into the ARCHIVE table. The ARCHIVE and ACTIVITIES table both have ACTIVITY as a primary key.
B. For activities whose description has changed, update the description in the ARCHIVE table. For new activities, insert into the ARCHIVE table. The ARCHIVE and ACTIVITIES table both have ACTIVITY as a primary key.
C. For activities whose description has changed, update the description in the ACTIVITY table. For new activities, insert into the ACTIVITIES table. The ARCHIVE and ACTIVITIES table both have ACTIVITY as a primary key.
D. The statement will fail since MERGE is not a supported operator.

Answer: B

Explanation:

Question No : 27

Which of the following statements is true for declared global temporary tables?