Lab 3. Exception Handling and Dynamic SQL

**3.1: Modify the programs created in Lab2 to implement Exception Handling**

**INPUT:**

DECLARE

CURSOR C\_staff IS

SELECT Staff\_Code,Staff\_Name,Staff\_Sal FROM Staff\_Master WHERE Dept\_Code=&Dept\_Code;

myvar C\_staff%ROWTYPE;

cnt Number:=0;

No\_rec\_ret EXCEPTION;

BEGIN

OPEN C\_staff;

LOOP

FETCH C\_staff INTO myvar;

IF C\_staff%FOUND THEN

cnt:=cnt+1;

DBMS\_OUTPUT.PUT\_LINE(myvar.Staff\_Code||' '||myvar.Staff\_Name||' '||myvar.Staff\_Sal);

ELSE

EXIT;

END IF;

END LOOP;

IF cnt=0 THEN

RAISE No\_rec\_ret;

END IF;

EXCEPTION

WHEN No\_rec\_ret THEN

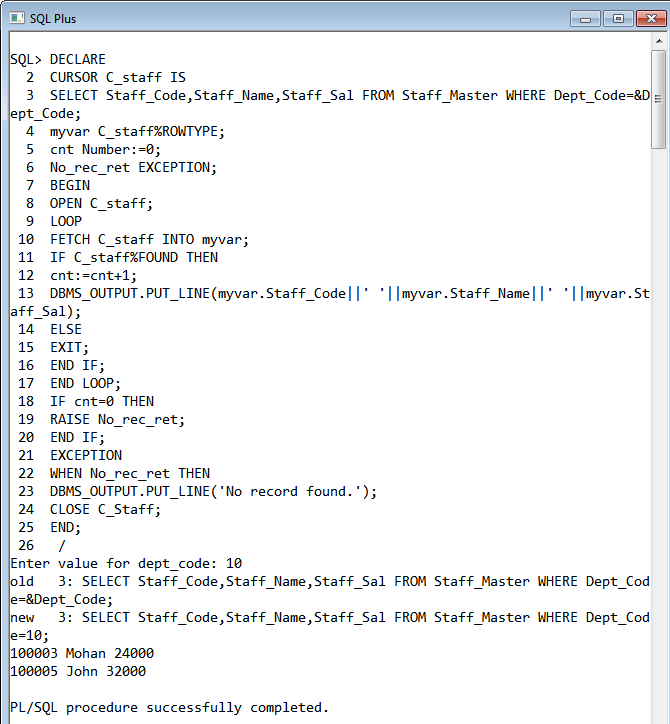
DBMS\_OUTPUT.PUT\_LINE('No record found.');

CLOSE C\_Staff;

END;

/

**OUTPUT:**



**3.2 The following PL/SQL block attempts to calculate bonus of staff for a given**

**MGR\_CODE. Bonus is to be considered as twice of salary. Though Exception Handling**

**has been implemented but block is unable to handle the same.**

**Debug and verify the current behavior to trace the problem.**

DECLARE

V\_BONUS V\_SAL%TYPE;

V\_SAL STAFF\_MASTER.STAFF\_SAL%TYPE;

BEGIN

SELECT STAFF\_SAL INTO V\_SAL

FROM STAFF\_MASTER

WHERE MGR\_CODE=100006;

V\_BONUS:=2\*V\_SAL;

DBMS\_OUTPUT.PUT\_LINE('STAFF SALARY IS ' || V\_SAL);

DBMS\_OUTPUT.PUT\_LINE('STAFF BONUS IS ' || V\_BONUS);

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('GIVEN CODE IS NOT VALID.ENTER VALID CODE');

END;

**INPUT:**

DECLARE

V\_BONUS V\_SAL%TYPE;

V\_SAL STAFF\_MASTER.STAFF\_SAL%TYPE;

BEGIN

SELECT STAFF\_SAL INTO V\_SAL

FROM STAFF\_MASTER

WHERE MGR\_CODE=100006;

V\_BONUS:=2\*V\_SAL;

DBMS\_OUTPUT.PUT\_LINE('STAFF SALARY IS ' || V\_SAL);

DBMS\_OUTPUT.PUT\_LINE('STAFF BONUS IS ' || V\_BONUS);

EXCEPTION

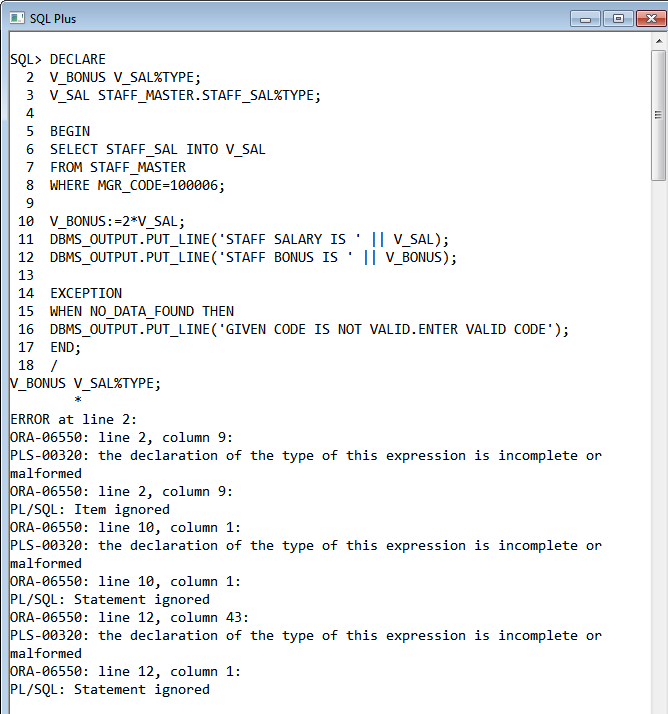
WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('GIVEN CODE IS NOT VALID.ENTER VALID CODE');

END;

/

**OUTPUT:**



**3.3 Rewrite the above block to achieve the requirement.**

**INPUT:**

DECLARE

V\_SAL STAFF\_MASTER.STAFF\_SAL%TYPE;

V\_BONUS V\_SAL%TYPE;

BEGIN

SELECT distinct STAFF\_SAL INTO V\_SAL FROM STAFF\_MASTER WHERE MGR\_CODE=100006;

V\_BONUS:=2\*V\_SAL;

DBMS\_OUTPUT.PUT\_LINE('STAFF SALARY IS ' || V\_SAL);

DBMS\_OUTPUT.PUT\_LINE('STAFF BONUS IS ' || V\_BONUS);

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

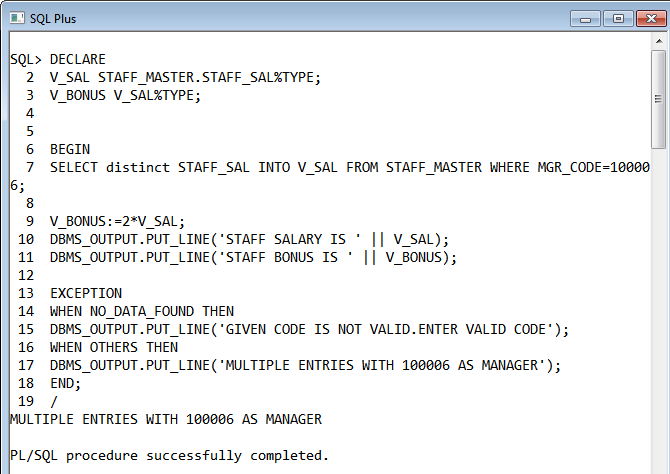
DBMS\_OUTPUT.PUT\_LINE('GIVEN CODE IS NOT VALID.ENTER VALID CODE');

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('MULTIPLE ENTRIES WITH 100006 AS MANAGER');

END;

**OUTPUT:**



**3.4 Predict the output of the following block ? What corrections would be needed to make it**

**more efficient?**

BEGIN

DECLARE

fname emp.ename%TYPE;

BEGIN

SELECT ename INTO fname

FROM emp

WHERE 1=2;

DBMS\_OUTPUT.PUT\_LINE('This statement will print');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some inner block error');

END;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('No data found in fname');

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some outer block error');

END;

**INPUT:**

BEGIN

DECLARE

fname emp.ename%TYPE;

BEGIN

DBMS\_OUTPUT.PUT\_LINE('This statement will print');

SELECT ename INTO fname

FROM emp

WHERE 1=2;

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some inner block error');

END;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

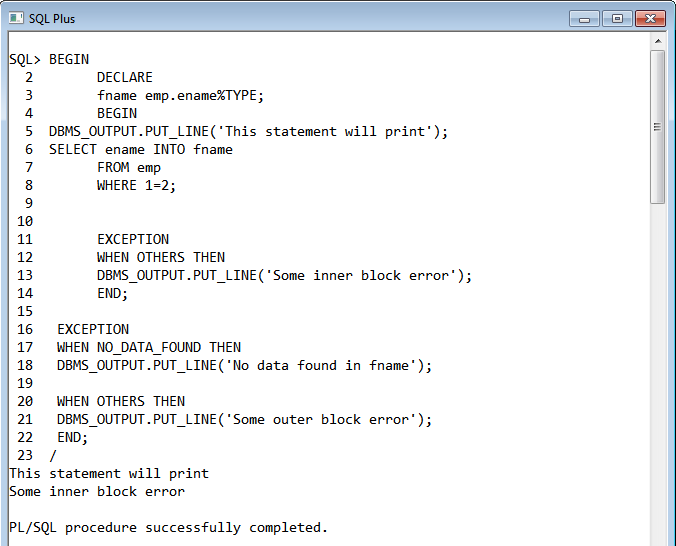
DBMS\_OUTPUT.PUT\_LINE('No data found in fname');

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some outer block error');

END;

**OUTPUT:**

****

**3.5 Debug the above block to trace the flow of control. Additionally one can make appropriate changes in Select statement defined in the block to check the flow.**

**INPUT:**

BEGIN

DECLARE

fname emp.ename%TYPE;

BEGIN

DBMS\_OUTPUT.PUT\_LINE('This statement will print');

SELECT ename INTO fname

FROM emp

WHERE empno=&empno;

DBMS\_OUTPUT.PUT\_LINE('This statement will print');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some inner block error');

END;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('No data found in fname');

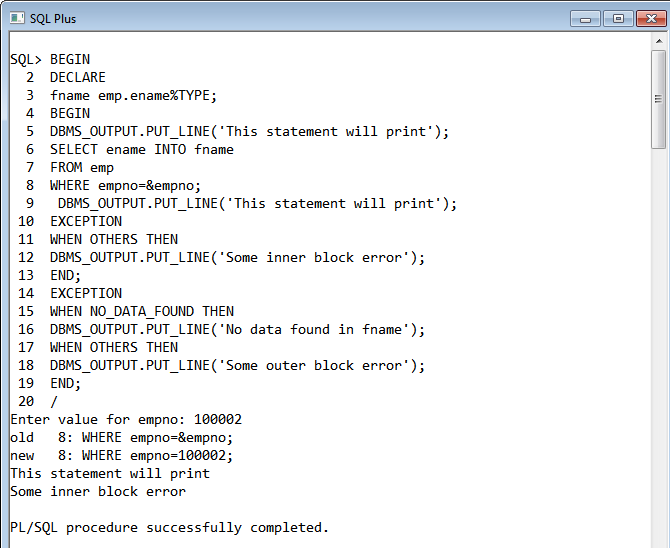
WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Some outer block error');

END;

/

**OUTPUT:**



**3.6: Write a PL/SQL program to check for the commission for an employee no 7369. If no**

**commission exists, then display the error message. Use Exceptions.**

**INPUT:**

DECLARE

MYEXCEPTION EXCEPTION ;

commission emp.ename%TYPE;

BEGIN

SELECT comm INTO commission

FROM emp

WHERE empno=7369;

if trim(commission) is NULL then

raise MYEXCEPTION;

else

dbms\_output.put\_line('Commission for employee 7369 is '||' '||commission);

end if;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

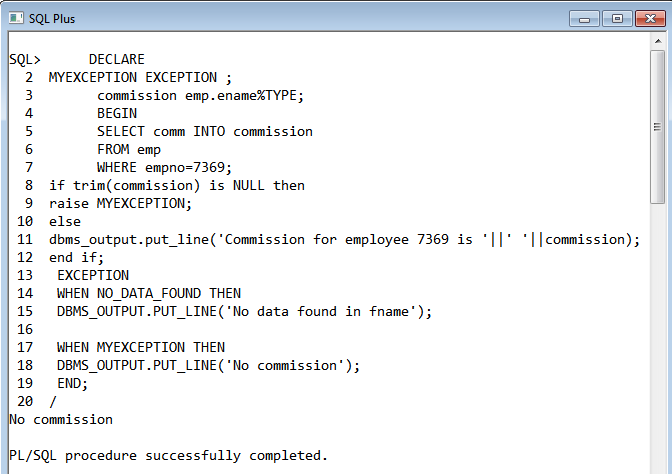
DBMS\_OUTPUT.PUT\_LINE('No data found in fname');

WHEN MYEXCEPTION THEN

DBMS\_OUTPUT.PUT\_LINE('No commission');

END;

**OUTPUT:**



**3.7: Write a PL/SQL block to drop any user defined table.**

**INPUT:**

BEGIN

execute immediate 'DROP TABLE &name' ;

END;

/

**OUTPUT:**

