***PL/SQL LAB 1***

**1**.The problem in the declarations is

a)V\_Sample2 CONSTANT NUMBER(2)

Because constant variables must be initialized

b)V\_Sample3 NUMBER(2) NOT NULL

NOT NULL values must be initialized

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**2**.<<outer>>

DECLARE

Var\_num1 number:=5;

BEGIN

<<inner>>

Var\_num1 NUMBER:=10;

BEGIN

DBMS\_OUTPUT.PUT\_LINE(‘value for var\_num:’||var\_num1);

DBMS\_OUTPUT.PUT\_LINE(‘Yes var\_num:’||outer\_var\_num1);

END;

DBMS\_OUTPUT.PUT\_LINE(‘no’);

END;

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**3.** DECLARE

-- Create a Record

TYPE empRec IS

RECORD

(

id employee.empno%TYPE,

name employee.ename%TYPE,

hiredate employee.hiredate%TYPE,

salary employee.sal%TYPE,

deptno employee.deptno%TYPE

);

erec empRec;

BEGIN

-- Select values

SELECT empno,ename,hiredate,sal,deptno

INTO erec

FROM employee

WHERE empno='7369';

-- Display Output

DBMS\_OUTPUT.PUT\_LINE('\*\*\*\*\*Employee Details\*\*\*\*\*\*\*\*\*');

DBMS\_OUTPUT.PUT\_LINE(' Id :'||erec.id);

DBMS\_OUTPUT.PUT\_LINE(' Name :'||erec.name);

DBMS\_OUTPUT.PUT\_LINE(' hiredate :'||erec.hiredate);

DBMS\_OUTPUT.PUT\_LINE(' Salary :'||erec.salary);

DBMS\_OUTPUT.PUT\_LINE(' Department No :'||erec.deptno);

DBMS\_OUTPUT.PUT\_LINE('\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*');

END;

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***4***. DECLARE

deptName department\_master.dept\_name%TYPE;

deptCode department\_master.dept\_code%TYPE;

BEGIN

SELECT dept\_code,dept\_name

INTO deptCode,deptName

FROM department\_master

WHERE dept\_code=10;

DBMS\_OUTPUT.PUT\_LINE('----Employee Details ----');

DBMS\_OUTPUT.PUT\_LINE(' Department Code : '||deptCode);

DBMS\_OUTPUT.PUT\_LINE(' Department Name : '||deptName);

DBMS\_OUTPUT.PUT\_LINE('-----------------------');

END;

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**5**. DECLARE

-- Create a Record

TYPE empRec IS

RECORD

(

name staff\_master.staff\_name%TYPE,

sal staff\_master.staff\_sal%TYPE,

dname VARCHAR(20)

);

erec empRec;

BEGIN

-- Select values

SELECT staff\_name,staff\_sal,dept\_name

INTO erec

FROM staff\_master s, department\_master d

WHERE s.dept\_code=d.dept\_code

AND s.staff\_name='&name';

-- Display Output

DBMS\_OUTPUT.PUT\_LINE(' Name :'||erec.name);

DBMS\_OUTPUT.PUT\_LINE(' Salary :'||erec.sal);

DBMS\_OUTPUT.PUT\_LINE(' Department :'||erec.dname);

END;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**6.** --Declare variables and cursor

DECLARE

CURSOR eCur is SELECT staff\_code,staff\_name,staff\_sal FROM staff\_master WHERE dept\_Code=&dept;

ID staff\_master.staff\_code%TYPE;

ename staff\_master.staff\_name%TYPE;

salary staff\_master.staff\_sal%TYPE;

---Begin select to process rows

BEGIN

OPEN eCur;

-- Process the rows

LOOP

FETCH eCur INTO ID,ename,salary;

DBMS\_OUTPUT.PUT\_LINE('--Employee Details--');

DBMS\_OUTPUT.PUT\_LINE('Id :'||ID);

DBMS\_OUTPUT.PUT\_LINE('Name :'||ename);

DBMS\_OUTPUT.PUT\_LINE('Salary :'||salary);

DBMS\_OUTPUT.PUT\_LINE('--------------------');

EXIT WHEN eCur%NOTFOUND;

END LOOP;

DBMS\_OUTPUT.PUT\_LINE(eCur%ROWCOUNT||' Employee Details displayed');

CLOSE eCur;

END;

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**7.** DECLARE

CURSOR empCUR is SELECT ename,sal FROM emp WHERE deptno='&dept' FOR UPDATE OF sal;

name emp.ename%TYPE;

salary emp.sal%TYPE;

BEGIN

OPEN empCUR;

LOOP

FETCH empCUR INTO name,salary;

EXIT WHEN empCUR%NOTFOUND;

salary:=salary\*0.3;

IF(salary>5000) THEN

UPDATE emp SET sal=sal+5000 WHERE current of empCUR;

DBMS\_OUTPUT.PUT\_LINE('Empname' ||' '||name);

DBMS\_OUTPUT.PUT\_LINE('Empsalary'||' '||salary);

ELSIF(salary<5000) THEN

UPDATE emp SET sal=sal+salary WHERE current of empCUR;

DBMS\_OUTPUT.PUT\_LINE('Empname'||' '||name);

DBMS\_OUTPUT.PUT\_LINE('Empsalary'||' '||salary);

ELSE

DBMS\_OUTPUT.PUT\_LINE(name||' '||salary);

END IF;

END LOOP;

CLOSE empCUR;

END;

**8.** DECLARE cursor ecur is SELECT s.student\_name,s.student\_code,sm.subject1,sm.subject2,sm.subject3 FROM student\_master s,student\_marks sm

WHERE

(s.student\_code=sm.student\_code )and (sm.student\_year=&year) AND (s.dept\_code=&dept);

total number(10);

percent number(5);

grade varchar2(2);

id number(5);

name varchar2(10);

m1 number(3);

m2 number(3);

m3 number(3);

NO\_SUCH\_DEPT EXCEPTION;

DCOUNTER number(4);

BEGIN

open ecur;

LOOP

FETCH ecur INTO name,id,m1,m2,m3;

total:=m1+m2+m3;

percent:=(total/300)\*100;

IF(percent>80) THEN

grade:='A';

ELSIF(percent>=70 AND percent<80) THEN

grade:='B';

ELSIF(percent>=60 AND percent<70) THEN

grade:='C';

else

grade:='D';

END IF;

DBMS\_OUTPUT.PUT\_LINE('\*\*\*\*\*\*\*\*\*STUDENT REPORT\*\*\*\*\*\*\*\*\*');

DBMS\_OUTPUT.PUT\_LINE('ID'||id);

DBMS\_OUTPUT.PUT\_LINE('name'||name);

DBMS\_OUTPUT.PUT\_LINE('subject1'||m1);

DBMS\_OUTPUT.PUT\_LINE('subject2'||m2);

DBMS\_OUTPUT.PUT\_LINE('subject3'||m3);

DBMS\_OUTPUT.PUT\_LINE('Total'||total);

DBMS\_OUTPUT.PUT\_LINE('Percentage'||percent);

DBMS\_OUTPUT.PUT\_LINE('Grade'||grade);

DBMS\_OUTPUT.PUT\_LINE('\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*');

EXIT WHEN ecur%NOTFOUND;

END LOOP;

DCOUNTER:=ecur%ROWCOUNT;

IF(DCOUNTER=0) THEN

RAISE NO\_SUCH\_DEPT;

END IF;

CLOSE ecur;

EXCEPTION

WHEN NO\_SUCH\_DEPT THEN  
 DBMS\_OUTPUT.PUT\_LINE(‘No department details found’);

END;

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**9**. --Declare variables and cursor

DECLARE

CURSOR eCur is SELECT \* FROM staff\_master WHERE dept\_Code='&dept';

emp staff\_master%ROWTYPE;

---Begin select to process rows

BEGIN

OPEN eCur;

-- Process the rows

LOOP

FETCH eCur INTO emp;

DBMS\_OUTPUT.PUT\_LINE('--Staff Details--');

DBMS\_OUTPUT.PUT\_LINE('Id :'||emp.staff\_Code);

DBMS\_OUTPUT.PUT\_LINE('Name :'||emp.staff\_name);

DBMS\_OUTPUT.PUT\_LINE('Salary :'||emp.staff\_sal);

DBMS\_OUTPUT.PUT\_LINE('Hiredate :'||emp.hiredate);

DBMS\_OUTPUT.PUT\_LINE('Department:'||emp.dept\_code);

DBMS\_OUTPUT.PUT\_LINE('--------------------');

EXIT WHEN eCur%NOTFOUND;

END LOOP;

DBMS\_OUTPUT.PUT\_LINE(eCur%ROWCOUNT||' Staff Details displayed');

CLOSE eCur;

END;