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Class :- MCA (sem-1)

Division :- B

Roll No. :- 124

Paper No. :- 101

Subject :- RDBMS

Assignment No. :- 02

Write PL/SQL code for the following :-

1. Enter a Empno, check if the Empno exists or not and then display name and designation of the employee if the Empno exists, otherwise display appropriate message. Do not use Cursor and Exception.

```
declare
    vempno emp.empno%type;
    erec emp%rowtype;
    x number(2);
begin
    vempno := :enter_empno;
    select count(*) into x from emp where empno = vempno;
    if x=1 then
        dbms_output.put_line('Empno exists...');
        select * into erec from emp where empno = vempno;
        dbms_output.put_line('Name : '|| erec.ename || ' Designation : '|| erec.job);
    else
        dbms_output.put_line('Empno Not exists..');
    end if;
end;
/
```

2. Display details of all the employees without using a cursor. (Display only empno, ename, job, salary and manager's name).

```
declare
    mgrname emp.ename%type;
begin
    dbms_output.put_line('Empno    Ename    Job    Salary    Manage_Nname');
    dbms_output.put_line('-----');
    for i in (select * from emp)
    loop
        for j in (select ename from emp where empno=i.mgr)
        loop
            mgrname := j.ename;
        end loop;
        dbms_output.put_line(i.empno || '    ' || i.ename || '    ' || i.job || '    ' || i.sal || '    ' || mgrname);
    end loop;
end;
/
```

3. Display department details & details of each employee in every department (i.e. department wise employee details). (Display only empno, ename, job & sal as details of employees). The report should be in following format. (Do not use Cursor). (NOTE: Ignore Departments not having any employee in the report).

Deptno: 99 Department Name: XXXXXXXXXXXX Location: XXXXXXXXXXXX

Empno Name Designation Salary

9999 XXXXXXXX XXXXXXXX 999999

Total Salary: 999999

Highest Salary: 999999

Lowest Salary: 999999

```

begin
    for i in (select * from dept where deptno in (select deptno from emp))
    loop
        dbms_output.put_line(' Department No. : ' || i.deptno || ' Department Name : ' || i.dname || ' Location
        : ' || i.loc);
        dbms_output.put_line('-----');
        dbms_output.put_line('Empno      Name      Designation      Salary');
        dbms_output.put_line('-----');
        for j in (select * from emp where deptno = i.deptno)
        loop
            dbms_output.put_line(j.empno ||      ' || j.ename ||      ' || j.job ||      ' || j.sal);
        end loop;
        dbms_output.put_line('-----');
        for k in (select sum(sal) total, max(sal) highsal, min(sal) lowsals from emp where deptno =
        i.deptno)
        loop
            dbms_output.put_line(' Total Salary : ' || k.total);
            dbms_output.put_line(' Highest Salary : ' || k.highsal);
            dbms_output.put_line(' Lowest Salary : ' || k.lowsals);
            dbms_output.put_line('-----');
        end loop;
    end loop;
end;
/

```

4. Rewrite the code in ques. 2 using cursors. (Do not use FOR loop and parameterised cursor).

```
declare
    cursor ecur is select * from emp;
    erec ecur%rowtype;
    mgrname emp.ename%type;
begin
    open ecur;
    loop
        fetch ecur into erec;
        exit when ecur%notfound;
        declare
            cursor cur is select ename from emp where empno = erec.mgr;
            rec cur%rowtype;
        begin
            open cur;
            fetch cur into rec;
            mgrname := rec.ename;
            close cur;
        end;
        dbms_output.put_line(erec.empno || ' ' || erec.ename || ' ' || erec.job || ' ' || erec.sal || ' ' || mgrname);
    end loop;
    close ecur;
end;
/
```

5. Rewrite the code in ques. 3 using cursors. (Do not use FOR loop and parameterised cursor).

```
declare
    cursor dcur is select * from dept where deptno in (select deptno from emp);
    drec dcur%rowtype;
begin
    open dcur;
    loop
        fetch dcur into drec;
        exit when dcur%notfound;

        dbms_output.put_line(' Department No. : ' || drec.deptno || ' Department Name : ' || drec.dname
        || 'Location : ' || drec.loc);

        dbms_output.put_line('-----');
        dbms_output.put_line('Empno ' ||      '|| Name ' ||      '|| Designation ' ||      '|| Salary');
        dbms_output.put_line('-----');
        declare
            cursor ecur is select * from emp where deptno = drec.deptno;
            erec ecur%rowtype;
        begin
            open ecur;
            loop
                fetch ecur into erec;
                exit when ecur%notfound;

                dbms_output.put_line(erec.empno || ' ' || erec.ename || ' ' || erec.job|| ' ' || erec.sal);
            end loop;
            close ecur;
        end;
        dbms_output.put_line('-----');
        declare
            cursor edcur is select sum(sal) total, max(sal) highsal, min(sal) lowsal from emp where
            deptno = drec.deptno group by deptno;
            edrec edcur%rowtype;
        begin
            open edcur;
            loop
                fetch edcur into edrec;
                exit when edcur%notfound;

                dbms_output.put_line(' Total Salary : ' || edrec.total);
                dbms_output.put_line(' Highest Salary : ' || edrec.highsal);
                dbms_output.put_line(' Lowest Salary : ' || edrec.lowsal);
            end loop;
            close edcur;
        end;
        dbms_output.put_line('-----');
    end loop;
    close dcur;
end;
/
```

6. Rewrite the code in ques. 2 using cursors (use FOR loop and parameterised cursor).

```
declare
    cursor ecur is select * from emp;
    cursor mcur(vmgr emp.mgr%type) is select ename from emp where empno = vmgr;
    mgrname emp.ename%type;
begin
    dbms_output.put_line('Empno      Ename      Job      Salary      Manage_Nname');
    dbms_output.put_line('-----');
    for erec in ecur
    loop
        for mrec in mcur(erec.mgr)
        loop
            mgrname := mrec.ename;
        end loop;
        dbms_output.put_line(erec.empno || ' ' || erec.ename || ' ' || erec.job || ' ' || erec.sal || ' ' || mgrname);
    end loop;
end;
/
```

7. Rewrite the code in ques. 3 using cursors (use FOR loop and parameterised cursor).

```
declare
    cursor dcur is select * from dept where deptno in (select deptno from emp);
    cursor ecur(vdeptno emp.deptno%type) is select * from emp where deptno = vdeptno;
    cursor edcur(vdeptno emp.deptno%type) is select sum(sal) total, max(sal) highsal, min(sal) lowsal from
    emp where deptno = vdeptno group by deptno;

begin
    for drec in dcur
    loop
        dbms_output.put_line(' Department No. : ' || drec.deptno || ' Department Name : ' || drec.dname ||
        Location : ' || drec.loc);
        dbms_output.put_line('-----');
        dbms_output.put_line('Empno ' ||      '|| Name ' ||      '|| Designation ' ||      '|| Salary');
        dbms_output.put_line('-----');
        for erec in ecur(drec.deptno)
        loop
            dbms_output.put_line(erec.empno ||      '|| erec.ename ||      '|| erec.job||      '|| erec.sal);
        end loop;
        dbms_output.put_line('-----');
        for edrec in edcur(drec.deptno)
        loop
            dbms_output.put_line(' Total Salary : ' || edrec.total);
            dbms_output.put_line(' Highest Salary : ' || edrec.highsal);
            dbms_output.put_line(' Lowest Salary : ' || edrec.lowsal);
        end loop;
        dbms_output.put_line('-----');
    end loop;

end;

/
```


8. Display employee wise, customer wise order details as shown in the following format:

Empno: 9999 Name: XXXXXX Deptno: 99 Dept Name: XXXXX

Custid Name City

999999 XXXXXXXXXX XXXXXXXXX

Ordid OrderDate OrderAmount

9999 99/99/9999 999999.99

9999 99/99/9999 999999.99

Total Amount: 9999999.99

----- and so on...

declare

```
cursor ecur is select distinct e.empno empno,e.ename ename,e.deptno deptno,d.dname dname from
emp e, dept d , customer c, ord o where e.deptno = d.deptno and e.empno=c.repno and c.custid =
o.custid ;
```

```
cursor ccur(vempno emp.empno%type) is select c.custid custid,c.name name,c.city city,sum(o.total)
totalamt from customer c, ord o where repno = vempno and c.custid = o.custid group by
c.custid,c.name,c.city;
```

```
cursor ocur(vcustid customer.custid%type) is select o.ordid ordid, o.orderdate orderdate, o.total total
from ord o where o.custid = vcustid ;
```

begin

```
for erec in ecur
```

```
loop
```

```
dbms_output.put_line(' EmpNo. : ' || erec.empno ||'      Name : '|| erec.ename ||'      DeptNo. :
'|| erec.deptno ||'      Dept Name : '|| erec.dname);
```

```
dbms_output.put_line('-----');
```

```
dbms_output.put_line('      Custid      CustName      City ');
```

```
dbms_output.put_line('      -----');
```

```
for crec in ccur(erec.empno)
```

```
loop
```

```
dbms_output.put_line('      '|| crec.custid ||'      '|| crec.name ||'      '|| crec.city);
```

```
dbms_output.put_line('      -----');
```

```
dbms_output.put_line('      OrdId      OrderDate      OrderAmount ');
```

```
dbms_output.put_line('      -----');
```

```
for orec in ocur(crec.custid)
```

```
loop
```

```
dbms_output.put_line('      '|| orec.ordid ||'      '|| orec.orderdate ||'      '|| orec.total);
```

```

        end loop;
        dbms_output.put_line('-----');
        dbms_output.put_line('Total Amount : '|| crec.totalamt);
        dbms_output.put_line('-----');
        end loop;
        dbms_output.put_line('-----');
    end loop;
end;
/

```

9. Generate representative-wise (representative is an employee through whom the customers place order) report in following format:

Empno: 9999 Name: XXXXXX Deptno: 99 Dept Name: XXXXX

CustId CustName Total Orders Total Order Amount

999999 XXXXXXXXXXXX 999 9,99,999.99

declare

```
cursor ecur is select distinct e.empno empno,e.ename ename,e.deptno deptno,d.dname dname from
emp e, dept d , customer c, ord o where e.deptno = d.deptno and e.empno=c.repid and c.custid =
o.custid ;
```

```
cursor ocur(vempno emp.empno%type) is select c.custid custid, c.name name, count(o.ordid) totalord,
sum(o.total) totalamt from emp e, customer c, ord o where e.empno = vempno and e.empno = c.repid
and c.custid = o.custid group by c.custid,c.name;
```

begin

```
for erec in ecur
```

```
loop
```

```
dbms_output.put_line('EmpNo. : ' || erec.empno || ' Name : ' || erec.ename || ' DeptNo. : ' ||
erec.deptno || ' Dept Name : ' || erec.dname);
```

```
dbms_output.put_line('-----');
```

```
dbms_output.put_line('CustId ' || ' ' CustName ' || ' ' Total Orders ' || ' ' Total Order Amount');
```

```
dbms_output.put_line('-----');
```

```
for orec in ocur(erec.empno)
```

```
loop
```

```
dbms_output.put_line(orec.custid || ' ' orec.name || ' ' orec.totalord || ' ' orec.totalamt);
```

```
end loop;
```

```
dbms_output.put_line('-----');
```

```
end loop;
```

```
end;
```

```
/
```