Assignment no 6

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1. The bank manager has decided to activate all those accounts which were previously marked as inactive for performing no transaction in last 365 days. Write a PL/SQ block (using implicit cursor) to update the status of account, display an approximate message based on the no. of rows affected by the update.

Pl/sql block:

```
declare
        rows_aff number(3);
begin
        update bank_accounts set acc_status='active' where acc_status='inactive';
        if sql%found then
                dbms_output.put_line('Status changes');
        elsif sql%notfound then
                dbms_output.put_line('No rows affected');
        end if;
        rows_aff := sql%rowcount;
        dbms_output.put_line('Total records changed : ' || rows_aff);
end;
```

output:

```
SQL> select * from bank_accounts;

    ACC_NO ACC_STATUS
---------- ----------
       101 active
       102 inactive
       103 active
       104 active
       105 inactive
       106 inactive

6 rows selected.
```

```
PL/SQL procedure successfully completed.

SQL> select * from bank_accounts;

    ACC_NO ACC_STATUS
---------- ----------
       101 active
       102 active
       103 active
       104 active
       105 active
       106 active

6 rows selected.
```

2. Organization has decided to increase the salary of employees by 10% of existing salary, who are having salary less than average salary of organization, Whenever such salary updates takes place, a record for the same is maintained in the increment_salary table.

EMP (E_no , Salary)

increment_salary(E_no , Salary)

pl/sql block:

```
declare
        cursor crsr is select e_no,salary from e_emp where salary<(select avg(salary) from e_emp);
        meno e_emp.e_no%type;
        msal e_emp.salary%type;
        minc e_emp.salary%type;
begin
        open crsr;
        if crsr%isopen then
                loop
                fetch crsr into meno,msal;
                exit when crsr%notfound;
                msal := msal+msal*0.1;
                insert into increment_salary values(meno,msal);
                end loop;
        end if;
        close crsr;
end;
```

output:

```
SQL> select * from e_emp;

      E_NO     SALARY
---------- ----------
       501      40000
       502      10000
       505      25000
       601      19000
       102      34000
       290       9900

6 rows selected.
```

```
PL/SQL procedure successfully completed.

SQL> select * from increment_salary;

      E_NO     SALARY
---------- ----------
       502      11000
       601      20900
       290      10890
```

```
SQL> select avg(salary) from e_emp;

AVG(SALARY)
-----------
 22983.3333
```

3. Write PL/SQL block using explicit cursor for following requirements:

College has decided to mark all those students detained (D) who are having attendance less than 75%.. Whenever such update takes place, a record for the same is maintained in the D_Stud table.

create table stud21(roll number(4), att number(4), status varchar(1));

create table d_stud(roll number(4), att number(4));

pl/sql block:

```
declare
        cursor crsr is select roll,att,status from stud21 where att<75;
        mroll stud21.roll%type;
        matt stud21.att%type;
        mstatus stud21.status%type;
begin
        open crsr;
        if crsr%isopen then
                loop
                fetch crsr into mroll,matt,mstatus;
                exit when crsr%notfound;
                update stud21 set status='D' where roll=mroll;
                insert into d_stud values (mroll,matt);
                end loop;
        end if;
        close crsr;
end;
```

output:

```
SQL> select * from stud21;

      ROLL        ATT STATU
---------- ---------- -----
        10         70
        11         80
        12         74
        14         65
        15         90
        16         75
        17         72
        18         86

8 rows selected.
```

```
PL/SQL procedure successfully completed.

SQL> select * from d_stud;

      ROLL        ATT
---------- ----------
        10         70
        12         74
        14         65
        17         72

SQL> select * from stud21;

      ROLL        ATT STATU
---------- ---------- -----
        10         70 D
        11         80
        12         74 D
        14         65 D
        15         90
        16         75
        17         72 D
        18         86

8 rows selected.
```

4. Write a PL/SQL block of code using parameterized Cursor, that will merge the data available in the newly created table N_RollCall with the data available in the table O_RollCall. If the data in the first table already exist in the second table then that data should be skipped.

Pl/sql block:

```
Declare
        cursor crsr is select roll from o_rollcall;
        cursor crsr_chk(mroll number) is select roll from n_rollcall where roll=mroll;
        mroll new_class.roll%type;
        v number(10);
Begin
        Open crsr;
                Loop
                fetch crsr into mroll;
                Exit When crsr%NOTFOUND;
                Open crsr_chk(mroll);
                        Fetch crsr_chk into v;
                        if crsr_chk%FOUND Then
                        dbms_output.put_line('roll' || ' ' || mroll || ' ' || 'exist');
                        Else
                        dbms_output.put_line('Adding roll '|| mroll);
                        insert into n_rollcall values(mroll);
                        End if;
                Close crsr_chk;
                End loop;
        Close crsr;
End;
```

Output:

```
SQL> select * from n_rollcall;

      ROLL
----------
         1
        10
        11
```

```
roll 10 exist
roll 1 exist
roll 11 exist
Adding roll 12
Adding roll 13
Adding roll 15
Adding roll 20

PL/SQL procedure successfully completed.

SQL> select * from n_rollcall;

      ROLL
----------
         1
        10
        11
        12
        13
        15
        20

7 rows selected.
```

5. Write PL/SQL block using explicit cursor: Cursor FOR Loop for following requirements:

College has decided to mark all those students detained (D) who are having attendance less than 75%. Whenever such update takes place, a record for the same is maintained in the D_Stud table.

create table stud21(roll number(4), att number(4), status varchar(1));

create table d_stud(roll number(4), att number(4));

pl/sql block:

```
Declare
        Cursor crsr is select roll, att,status from stud21 where att<75;
Begin
        for i IN crsr
        loop
        update stud21 set status='D' where
        roll=i.roll;
        insert into d_stud values(i.roll,i.att);
        end loop;
End;
```

Output:

```
PL/SQL procedure successfully completed.

SQL> select * from stud21;

      ROLL        ATT STATU
---------- ---------- -----
        10         70 D
        11         80
        12         74 D
        14         65 D
        15         90
        16         75
        17         72 D
        18         86

8 rows selected.
```