CURSORS

1. Write a PL/SQL program using cursors to print empname, designation, salary, experience, depending on the criteria given below: a. If the employee has worked for 1 yr and 2 yrs increase salary by .2%

```
create procedure exampleproc(inout emp no int)
   begin
      declare done integer default 0;
      declare dep no integer;
      declare sal, pf, exp integer;
      declare name, designation, dept_name varchar(20);
      declare doj date;
      declare cur cursor for select * from employee;
      declare continue handler for not found set done = 1;
      open cur;
      label: loop
      fetch cur into emp_no, name, designation, dep_no, dept_name, doj,
      sal, pf, exp;
      select emp no, name, designation, dep no, dept name, doj, sal, pf,
      exp;
      if exp >2 then call updsal(sal);
      end if;
      if done = 1 then leave label;
      end if;
      end loop;
      close cur;
   end//
set @emp_no =0//
call exampleproc(@emp no)//
     emp_no
             name
                     designation
                                dep_no
                                         dept_name
                                                    doj
                                                               sal
                                                                      pf
                                                                             exp
                                                                            NULL
    7654
             Kirsten
                     Salesman
                                10
                                        Sales
                                                   2006-02-12
                                                               23500
                                                                      7285
```

(Here multiple records are fetched in different windows)

2. The HRD manager has decided to raise the salary for all the employees in department no:20 by .05% whenever such a raise is given to the employees the record for the same are maintained in empraise table. It includes eno, date when the raise was given and actual raise. Write a PL/SQL program to update sal of each and insert record in empraise table.

```
SET SQL_SAFE_UPDATES = 0//
create procedure updsal(inout sal int)
```

```
begin
      declare eno int ;
      declare dat date;
      DECLARE cur CURSOR FOR SELECT salary FROM employee where dept_no=20
      for update of salary;
      DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
      OPEN cur;
      label: LOOP
      FETCH cur INTO eno, dat, sal;
      update employee set salary=sal+0.5*sal;
      insert into empraise values (eno,curdate(),0.5*sal);
      IF done = 1 THEN LEAVE label;
      END IF;
      END LOOP;
      CLOSE cur;
   END//
set @sal=0//
call updsal(sal)//
   emp_no dat
   1002
          2022-10-24 17000
   1003 2022-10-24 14874
   1004 2022-10-24 7000
   1005 2022-10-24 2500
   1020
         2022-10-24 2600
```

3. Write a program using cursor to display the details of employees whose sum of sal and comm. Rs>6000

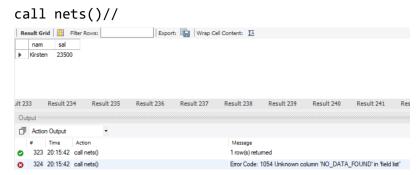
```
CREATE PROCEDURE q3()
BEGIN

DECLARE done INTEGER DEFAULT 0;
DECLARE dno INTEGER;
DECLARE sal, eno, pf, exp integer;
DECLARE nam, des, dep_name VARCHAR(20);
DECLARE doj DATE;
DECLARE cur CURSOR FOR SELECT emp_no, name, designation, dept_no, dept_name, date_of_join, salary, pf, exp FROM employee where salary+pf>6000;
DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
OPEN cur;
```

```
label: LOOP
      FETCH cur INTO eno, nam, des,dno,dep_name, doj,sal,pf,exp;
      select eno,nam,des,dno,dep_name,doj,sal,pf,exp;
      IF done = 1 THEN LEAVE label;
      END IF;
      END LOOP;
      CLOSE cur;
   END//
call q3()//
   emp no name
                designation dep_no dept_name doj
                                                            exp
                                                           NULL
                                        2006-02-12 23500 7285
▶ 7654
         Kirsten
                               Sales
```

4. Write a program to find the name, salary of employee with netsal(includes sal and comm.) if netsal>6000 display name, salary otherwise throw an exception

```
create procedure nets()
begin
     declare nam varchar(30);
     declare sal int;
     declare done int default 0;
     DECLARE cur CURSOR FOR SELECT name, salary FROM employee where
     salary+pf>6000;
     DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
     OPEN cur;
        label: LOOP
     FETCH cur INTO nam,sal ;
     select nam,sal;
     IF done = 1 THEN LEAVE label;
     END IF;
     END LOOP;
     if NO_DATA_FOUND then call err();
     end if;
     CLOSE cur;
   END//
create procedure err()
BEGIN
    DECLARE EXIT HANDLER FOR SQLEXCEPTION
    ROLLBACK;
    SELECT 'An error has occurred, operation rollbacked and the stored
procedure was terminated';
```



(Again multiple rows fetched in different windows and last row had no entry so it returned exception)

5. Write a program to increment the salary of all employees by Rs.2000 who belong to deptno=10 and display the number of rows updated using implicit cursors

```
create procedure upd(inout sal int,inout i int )
begin
      DECLARE cur CURSOR FOR SELECT salary FROM employee where dept_no=10
      for update of salary;
      DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
      OPEN cur;
      label: LOOP
      FETCH cur INTO sal;
      update employee set salary=sal+2000;
      set i=i+1;
      IF done = 1 THEN LEAVE label;
      END IF;
      END LOOP;
      CLOSE cur;
   END//
set @sal=0//
set @i=0//
call upd(sal,i)//
```