

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
▶	7654	Kirsten	Salesman	10	Sales	2006-02-12	23500	7285	NULL

(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 emprise 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 emprise 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 empraaise 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	salraise
▶	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	sal	pf	exp
►	7654	Kirsten	Salesman	10	Sales	2006-02-12	23500	7285	NULL

- 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';

```

END//

call nets()//

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
nam	sal			
Kirsten	23500			

Alt 233	Result 234	Result 235	Result 236	Result 237	Result 238	Result 239	Result 240	Result 241	Res
Output									
Action Output									
#	Time	Action	Message						
323	20:15:42	call nets()	1 row(s) returned						
324	20:15:42	call nets()	Error Code: 1054 Unknown column 'NO_DATA_FOUND' in field list						

(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)//
```

	i
▶	5