VNRVJIET NAME OF THE LAB: DATABASE MANAGEMENT SYSTEMS	WEEK NO:13 DATE:

DESCRIPTION:CURSORS

STUDENT TABLE:

S_ID	S_NAME	BRANCH	DOB	S_LEVEL
1	soumitha	CSE	28-10-2004	JL
2	sharanya	CSE	06-09-2004	SL
3	soumya	IT	09-11-2003	SL
4	abhinaya	ALML	17-08-2004	JL
5	navrin	ECE	04-05-2003	SL
6	mahita	CIVIL	07-09-2004	JL

FACULTY TABLE:

F_ID	F_NAME	SAL
101	soumitha	65000
102	sharanya	75000
103	abhinaya	65000
104	soumya	55000
105	shravya	4000

1.Write a cursor program to retrieve the details of all students using cursors.

SQL> declare

cursor stu_cur is

select s_id,s_name,branch,dob,s_level

from student2;

stu_id student2.s_id%type;

stu_name student2.s_name%type;

stu_branch student2.branch%type;

```
stu_dob student2.dob%type;
stu_level student2.s_level%type;
begin
open stu_cur;
loop
fetch stu_cur into stu_id,stu_name,stu_branch,stu_dob,stu_level;
exit when stu_cur%notfound;
dbms_output.put_line('student id: '||stu_id);
dbms_output.put_line('student name: '||stu_name);
dbms_output.put_line('branch: '||stu_branch);
dbms_output.put_line('date of birth: '||stu_dob);
dbms_output.put_line('level : '||stu_level);
end loop;
close stu_cur;
end;
/
```

OUTPUT:

```
student id: 1
student name: soumitha
branch: CSE
date of birth: 28-10-2004
level : JL
student id: 2
student name: sharanya
branch: CSE
date of birth: 06-09-2004
level : SL
student id: 3
student name: soumya
branch: IT
```

date of birth: 09-11-2003

level : SL

student id: 4

student name: abhinaya

branch: AIML

date of birth: 17-08-2004

level : JL

student id: 5

student name: navrin

branch: ECE

date of birth: 04-05-2003

level : SL

student id: 6

student name: mahita

branch: CIVIL

date of birth: 07-09-2004

level : JL

PL/SQL procedure successfully completed.

2.Write a PL/SQL block to update the level of students from JL to “junior Level” and SL to “senior Level “and insert a record in the new level table.

SQL> declare

cursor update_cur is

select s_id,s_name,s_level

from student2

where s_level in ('JL','SL')

for update;

begin

for stu_rec in update_cur

loop

update student2

set s_level=case

```
when stu_rec.s_level='JL' then 'Junior Level'
when stu_rec.s_level='SL' then 'Senior Level'
end
where current of update_cur;
insert into levels(s_id,sname,new_level)
values(stu_rec.s_id,stu_rec.s_name,case
when stu_rec.s_level='JL' then 'Junior Level'
when stu_rec.s_level='SL' then 'Senior Level'
end);
end loop;
end;
/
```

PL/SQL procedure successfully completed.

SQL> select * from levels;

S_ ID	SNAME	NEW_LEVEL
1	soumitha	Junior Level
2	sharanya	Senior Level
3	soumya	Senior Level
4	abhinaya	Junior Level
5	navrin	Senior Level
6	mahita	Junior Level

3.Create a cursor, which will update the table with an increase in the salary of each faculty by 5000, and use the SQL%ROWCOUNT attribute to determine the number of rows affected.

```
SOL>declare
row_count number;
begin
update faculty
set sal=sal+5000;
row_count:=sql%rowcount;
```

```
dbms_output.put_line('no.of rows updated:'||row_count);
end;
/
```

OUTPUT:

no.of rows updated:5

4.Create an Implicit Cursor for displaying the required faculty details.

```
SQL>declare
faculty_id int:=101;
faculty_name varchar2(20);
faculty_sal int;
begin
select f_id,f_name, sal
into faculty_id,faculty_name,faculty_sal
from faculty
WHERE f_id = faculty_id;
dbms_output.put_line(faculty_id||'   '||faculty_name||'    '||faculty_sal);
end;
/
```

OUTPUT:

101 soumitha 65000

5.Create an Explicit Cursor for displaying the faculty details whose salary is less than 5000.

```
SQL>declare
cursor fac_cursor is
select f_id, f_name, sal
from faculty
where sal < 5000;
fac_id faculty.f_id%type;
fac_name faculty.f_name%type;
fac_salary faculty.sal%type;
begin
```

```
open fac_cursor;
loop
fetch fac_cursor into fac_id, fac_name, fac_salary;
exit when fac_cursor%notfound;
dbms_output.put_line(fac_id||'    '||fac_name||'  '||fac_salary);
end loop;
close fac_cursor;
end;
/
```

OUTPUT:

105 shravya 4000

6.Create a cursor program to display the details of Senior Level students.

SQL>

```
declare
cursor senior_level_cursor is
select s_id,s_name,s_level
from student2
where s_level = 'Senior Level';
student_id student2.s_id%type;
student_name student2.s_name%type;
student_level student2.s_level%type;
begin
open senior_level_cursor;
loop
fetch senior_level_cursor into student_id,student_name,student_level;
exit when senior_level_cursor%notfound;
dbms_output.put_line(student_id||'      '||student_name||'   '||student_level);
end loop;
end;
/
```

OUTPUT:

2 sharanya Senior Level

3 soumya Senior Level

5 navrin Senior Level