

EXPERIMENT NO.9

Aim- To perform Queries for creating the cursors for calculating electricity bill and student's grade using bill and std table respectively.

Query 1: Create table bill and insert the following entries in it.

NAME	ADDRESS	CITY	UNIT
yuva	srivi	srivilliputtur	100
nithya	Lakshmi nagar	sivakasi	200
maya	housing board	sivakasi	300
jeeva	RRR nagar	sivaganagai	400

Create a cursor to calculate bill according to following rules-

S.No.	Units Consumed	Bill Calculation
1.	<100	Units *1
2	>100 and <=200	Units *2
3.	>200 and <=300	Units *3
4.	>300 and <=400	Units *4
5.	>400	Units *5

Solution-

```
create table bill(name varchar2(10), address varchar2(20), city varchar2(20), unit number(10));
```

```
insert into bill values('yuva','srivi','srivilliputtur','100');
```

```
insert into bill values('nithya','Lakshmi nagar','sivakasi','200');
```

```
insert into bill values('maya','housing board','sivakasi','300');
```

```
insert into bill values('jeeva','RRR nagar','sivaganagai','400');
```

```
select * from bill;
```

Output-

NAME	ADDRESS	CITY	UNIT
yuva	srivi	srivilliputtur	100
nithya	Lakshmi nagar	sivakasi	200
maya	housing board	sivakasi	300
jeeva	RRR nagar	sivaganagai	400

Solution-

```

declare
cursor c is select * from bill;
b bill %ROWTYPE;
begin
open c;
dbms_output.put_line('Name Address city Unit Amount');
loop
fetch c into b;
if(c % notfound) then
exit;
else
if(b.unit<=100) then
dbms_output.put_line(b.name||' '||b.address||' '||b.city||' '||b.unit||' '||b.unit*1);
elsif(b.unit>100 and b.unit<=200) then
dbms_output.put_line(b.name||' '||b.address||' '||b.city||' '||b.unit||' '||b.unit*2);
elsif(b.unit>200 and b.unit<=300) then
dbms_output.put_line(b.name||' '||b.address||' '||b.city||' '||b.unit||' '||b.unit*3);
elsif(b.unit>300 and b.unit<=400) then
dbms_output.put_line(b.name||' '||b.address||' '||b.city||' '||b.unit||' '||b.unit*4);
else
dbms_output.put_line(b.name||' '||b.address||' '||b.city||' '||b.unit||' '||b.unit*5);
end if;
end if;
end loop;
close c;
end;

```

Output-

```

Name Address city Unit Amount
yuva srivi srivilliputur 100 100
nithya Lakshmi nagar sivakasi 200 400
maya housing board sivakasi 300 900
jeeva RRR nagar sivaganagai 400 1600

```

Query 2: Create table std and insert the following entries in it.

NAME	ROLLNO	MARK1	MARK2	MARK3
gowri	101	78	89	99
prem	102	88	99	90
ravathi	103	67	89	99
arun	104	56	66	77

Create a cursor to calculate total of marks, average of marks and grade according to following rules-

S.No.	Condition	Grade
1.	mark1<50 or mark2<50 or mark3<50	F
2.	average>=90 and average<=100	S
3.	average>=80 and average<90	A+
4.	average>=70 and average<80	B
5.	average>=60 and average<70	C
6.	average<60	D

Solution-

```
create table std(name varchar(10), rollno number(3), mark1 number(3), mark2 number(3), mark3 number(3));
insert into std values('gowri','101','78','89','99');
insert into std values('prem','102','88','99','90');
insert into std values('ravathi','103','67','89','99');
insert into std values('arun','104','56','66','77');
select * from std;
```

Output-

NAME	ROLLNO	MARK1	MARK2	MARK3
gowri	101	78	89	99
prem	102	88	99	90
ravathi	103	67	89	99
arun	104	56	66	77

Solution-

```
declare
tot number;
average number;
cursor c is select * from std;
s std %ROWTYPE;
begin
```

```

open c;
dbms_output.put_line('Name Rollno Mark1 Mark2 Mark3 Total Average Grade');
loop
fetch c into s;
tot:=s.mark1+s.mark2+s.mark3;
average:=floor(tot/3);
if(c % notfound)then
exit;
else
if(s.mark1<50 or s.mark2<50 or s.mark3<50)then
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'F');
elsif(average>=90 and average<=100)then
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'S');
elsif(average>=80 and average<90)then
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'A+');
elsif(average>=70 and average<80)then
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'B');
elsif(average>=60 and average<70)then
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'C');
else
dbms_output.put_line(s.name||' '||s.rollno||' '||s.mark1||' '||s.mark2||' '||s.mark3||' '||tot||' '||average||' '||'D');
end if;
end if;
end loop;
close c;
end;

```

Output-

```

Name Rollno Mark1 Mark2 Mark3 Total Average Grade
gowri 101 78 89 99 266 88 A+
prem 102 88 99 90 277 92 S
ravathi 103 67 89 99 255 85 A+
arun 104 56 66 77 199 66 C

```