DBMS Lab Exercise-8 Pl/SQL Cursors

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```
create table customer_21bce1163 (cusid number(10),cusname
varchar(20), age number(10),adress varchar(20),sal number(10));
insert into customer_21bce1163(cusid ,cusname , age ,adress,sal)
values(1,'sandip',20,'westbengal',60000);
insert into customer_21bce1163(cusid ,cusname , age ,adress,sal)
values(2,'rohan',22,'jaypur',70000);
insert into customer_21bce1163(cusid ,cusname , age ,adress,sal)
values(3,'nidhish',23,'andhrapradesh',80000);
insert into customer_21bce1163(cusid ,cusname , age ,adress,sal)
values(4,'shneur',27,'mumbai',90000);
insert into customer_21bce1163(cusid ,cusname , age ,adress,sal)
values(5,'shivang',22,'delhi',75000);
select * from customer_21bce1163;
```

1. Write implicit cursor program would update the table and increase salary of each customer by 500 and use the SQL%ROWCOUNT attribute to determine the number of rows affected.

   Customer : ID | NAME | AGE | ADDRESS | SALARY

```
declare
vc number;
begin
update customer_21bce1163
set sal=sal+500;
vc:=sql%rowcount;
dbms_output.put_line(vc);
end;
select * from customer_21bce1163;
```

```
declare
vc number;
begin
update customer_21bce1163
set sal=sal+500;
vc:=sql%rowcount;
dbms_output.put_line(vc);
end;
select * from customer_21bce1163;
```

Results | Explain | Describe | Saved SQL | History

CUSID	CUSNAME	AGE	ADRESS	SAL
1	sandip	20	westbengal	60500
5	shivang	22	delhi	75500
4	shneur	27	mumbai	90500
2	rohan	22	jaypur	70500
3	nidhish	23	andhrapradesh	80500

5 rows returned in 0.00 seconds Download

2. Write explicit cursor program fetch the customer id, name and address from the table.

   Customer : ID | NAME | AGE | ADDRESS | SALARY

   declare

   cursor ccus is select cusid,cusname,adress from customer_21bce1163;

   cid customer_21bce1163.cusid%type;

   cname customer_21bce1163.cusname%type;

   cadress customer_21bce1163.adress%type;

   begin

   open ccus;

   loop

   fetch ccus into cid,cname,cadress;

   exit when ccus%notfound;

   dbms_output.put_line('id:'||cid);

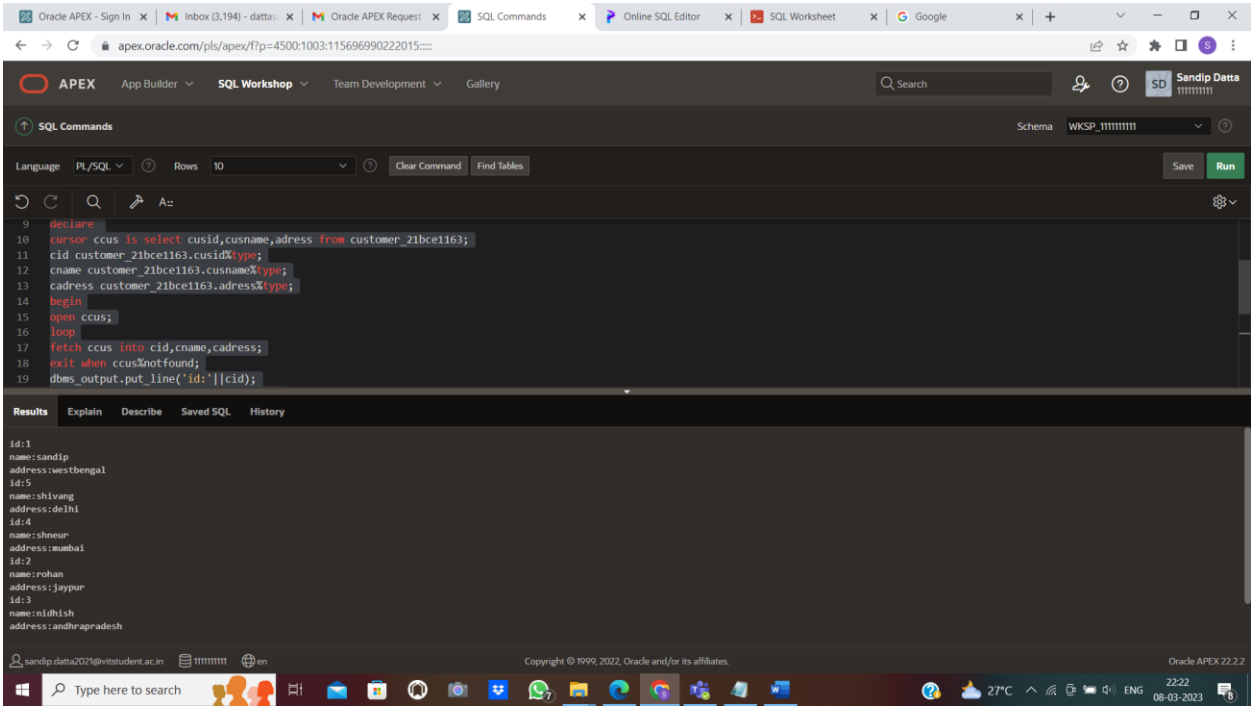
   dbms_output.put_line('name:'||cname);

   dbms_output.put_line('address:'||cadress);

   end loop;

close ccus;

end;



3. Consider schema of following

Sailor (<u>sid</u>, sname, rating, age)

Boat (<u>bid</u>, bname, color)

Reservation(<u>sid, bid</u>, day)

Sailor			
sid	sname	rating	age
22	Dustin	7	45.0
29	Brutus	1	33.0
31	Lubber	8	55.5
32	Andy	8	25.5
58	Rusty	10	35.0
64	Horatio	7	35.0
71	Zorba	10	16.0
74	Horatio	9	35.0
85	Art	3	25.5
95	Bob	3	63.5

Boat		
bid	bname	color
101	Interlake	blue
102	Interlake	red
103	Clipper	green
104	Marine	red

Reserve		
sid	bid	day
22	101	10/10/98
22	102	10/10/98
22	103	10/8/98
22	104	10/7/98
31	102	11/10/98
31	103	11/6/98
31	104	11/12/98
64	101	9/5/98
64	102	9/8/98
74	103	9/8/98

create table sailor (sid number(10), sname varchar(20), rating number(10), age number(2));

```
insert into sailor values(22,'dustin',7,45);
insert into sailor values(29,'brutus',1,33);
insert into sailor values(31,'lubber',8,55);
insert into sailor values(32,'andy',8,25);
insert into sailor values(58,'rusty',10,35);
insert into sailor values(64,'horatio',7,35);
insert into sailor values(71,'zorba',10,16);
insert into sailor values(74,'horatio',9,35);
insert into sailor values(85,'art',3,25);
insert into sailor values(95,'bob',3,63);
select * from sailor;
```

SID	SNAME	RATING	AGE
71	zorba	10	16
22	dustin	7	45
29	brutus	1	33
31	lubber	8	55
95	bob	3	63
32	andy	8	25
58	rusty	10	35
64	horatio	7	35
74	horatio	9	35
85	art	3	25

10 rows returned in 0.02 seconds Download

```
create table boat (bid number(10), bname varchar(20), color varchar(20));
insert into boat values(101,'interlake','blue');
insert into boat values(102,'interlake','red');
insert into boat values(103,'clipper','green');
insert into boat values(104,'marine','red');
select * from boat;
```

BID	BNAME	COLOR
102	interlake	red
101	interlake	blue
104	marine	red
103	clipper	green

4 rows returned in 0.01 seconds Download

```
create table reserve (sid number(10), bid number(10), day date);
insert into reserve values(22,101,to_date('10-10-98','dd-mm-yy'));
insert into reserve values(22,102,to_date('10-10-98','dd-mm-yy'));
insert into reserve values(22,103,to_date('10-08-98','dd-mm-yy'));
insert into reserve values(22,104,to_date('10-07-98','dd-mm-yy'));
insert into reserve values(31,102,to_date('11-10-98','dd-mm-yy'));
insert into reserve values(31,103,to_date('11-06-98','dd-mm-yy'));
insert into reserve values(31,104,to_date('11-12-98','dd-mm-yy'));
insert into reserve values(64,101,to_date('09-05-98','dd-mm-yy'));
insert into reserve values(64,102,to_date('09-08-98','dd-mm-yy'));
insert into reserve values(74,103,to_date('09-08-98','dd-mm-yy'));
select * from reserve;
```

SID	BID	DAY
22	101	10/10/2098
22	102	10/10/2098
31	102	10/11/2098
22	104	07/10/2098
22	103	08/10/2098
31	103	06/11/2098
31	104	12/11/2098
74	103	08/09/2098
64	101	05/09/2098
64	102	08/09/2098

10 rows returned in 0.02 seconds Download

Write an anonymous PL/SQL block that Defines a cursor that points to a record set that contains the sailors' names, reservation date and boat id where the boat color is red.

a. Opens the cursor
b. Uses a simple loop to fetch each record in the active set

c. Displays each last name, reservation date and boat id for each record to the output screen

```
declare
cursor rb is select s.sname,r.day,r.bid from sailor s, reserve r,boat b where  s.sid=r.sid and
r.bid=b.bid and b.color='red';
csname sailor.sname%type;
cday reserve.day%type;
cbid reserve.bid%type;
begin
open rb;
loop
fetch rb into csname,cday,cbid;
exit when rb%notfound;
dbms_output.put_line('name'||csname);
dbms_output.put_line('day'||cday);
dbms_output.put_line('bid'||cbid);
end loop;
close rb;
end;
```

```
namedustin
day10/10/2098
bid102
namedustin
day07/10/2098
bid104
namelubber
day10/11/2098
bid102
namelubber
day12/11/2098
bid104
namehoratio
day08/09/2098
bid102

Statement processed.
```

0.06 seconds