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BATCH: CE-3AB2

PRACTICAL: 7
PL / SQL PRACTICAL: 2

AIM: ROLLBACK, COMMIT AND CURSOR BASED PROGRAMS.

1. Analyze output of following scripts:

```
create table new_salary(id_no number(5),name varchar2(10),salary number
(10)); insert into new_salary values('1','Ram',8000);
insert into new_salary values('2','Shyam',6000);
insert into new_salary values('3','Mahesh',11000);
insert into new_salary values('4','Naresh',15000);
select *from new_salary;
```

Table NEW_SALARY created.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

| | ID_NO | NAME | SALARY |
|---|-------|--------|--------|
| 1 | 1 | Ram | 8000 |
| 2 | 2 | Shyam | 6000 |
| 3 | 3 | Mahesh | 11000 |
| 4 | 4 | Naresh | 15000 |

A. Begin

```
Insert into new_salary values ('6', '6000');
Update new_salary set salary=4000 where id=4;
Commit;
Rollback;
```

End;

/

Query: begin insert into new_salary
values('6','Ramu',6000); update new_salary set salary=4000
where id_no='4';

```
commit;
delete from new_salary where id_no='3';
rollback; end;
```

Output:

| ID_NO | NAME | SALARY |
|-------|----------|--------|
| 1 | 1 Ram | 8000 |
| 2 | 2 Shyam | 6000 |
| 3 | 3 Mahesh | 11000 |
| 4 | 4 Naresh | 4000 |
| 5 | 6 Ramu | 6000 |

B. Begin

```
Insert into new_salary values (6, 6000);
Savepoint first;
Update new_salary set salary=50000 where id=5;
Rollback to savepoint first;
End;
```

Query: begin insert into new_salary values('6','Ramu',6000); savepoint first; update new_salary set salary=50000 where id_no=3; rollback to savepoint first; end; **Output:**

| ID_NO | NAME | SALARY |
|-------|----------|--------|
| 1 | 1 Ram | 8000 |
| 2 | 2 Shyam | 6000 |
| 3 | 3 Mahesh | 11000 |
| 4 | 4 Naresh | 4000 |
| 5 | 6 Ramu | 6000 |
| 6 | 6 Ramu | 6000 |

2. Write pl/sql blocks that first insert the new record into table salary.

Update the salary of employee name 'Riya' and 'Rima' by 7000/- then check the total salary which does not exceed 20000/-if it happens then UNDO the update and give the error message "TOTAL SALARY EXCEED 20000".

Table : Salary

| Emp_no | Name | Salary |
|--------|-------|--------|
| 1001 | Riya | 5000 |
| 1002 | Rima | 10000 |
| 1003 | Rekha | 12000 |
| 1004 | Dhara | 6000 |

```
create table salary(emp_no number(10),name varchar2(10),salary number(10));
insert into salary values('1001','Riya',5000); insert into salary
values('1002','Rima',10000); insert into salary values('1003','Rekha',12000);
insert into salary values('1004','Dhara',6000); select *from salary;
```

| | EMP_NO | NAME | SALARY |
|---|--------|-------|--------|
| 1 | 1001 | Riya | 5000 |
| 2 | 1002 | Rima | 10000 |
| 3 | 1003 | Rekha | 12000 |
| 4 | 1004 | Dhara | 6000 |

Query: declare

s

```
number(20); emp number(10);
name varchar2(10);
salary number(10);
```

```
begin emp:=&emp;
name:='&name'; salary:=&salary;
insert into salary values(emp,name,salary); savepoint v;
update salary set salary=salary+7000 where name='Riya'; update
salary set salary=salary+7000 where name='Rima';
select sum(salary)into s from salary;
if s>20000 then rollback to
savepoint v;
DBMS_OUTPUT.PUT_LINE('TOTAL SALARY EXCEED 20000');
end if;
end;
```

Output:

Here, value for emp_no=1005, name=Sonu, salary=15000

| | EMP_NO | NAME | SALARY |
|---|--------|-------|--------|
| 1 | 1001 | Riya | 5000 |
| 2 | 1002 | Rima | 10000 |
| 3 | 1003 | Rekha | 12000 |
| 4 | 1004 | Dhara | 6000 |
| 5 | 1005 | Sonu | 15000 |

Total salary exceed 20000

3. Write a pl/sql to give 5% raise to every employee. Use Table Salary. Query: declare cursor cv is select emp_no,salary from salary; sal salary.salary%type;
emp number(10);

```
begin open
cv; loop
fetch cv into emp,sal; exit
when cv%notfound=true;
sal:=sal+sal*0.05; update salary set salary=sal
where emp_no=emp;
end loop; close cv; end;
```

Output:

| | EMP_NO | NAME | SALARY |
|---|--------|-------|--------|
| 1 | 1001 | Riya | 5250 |
| 2 | 1002 | Rima | 10500 |
| 3 | 1003 | Rekha | 12600 |
| 4 | 1004 | Dhara | 6300 |

4. Write a pl/sql block that find the table empmaster and stores the data into another table CITYLIST(no,name) where CITY='Bombay' . Create this pl/sql using following two:

Use pl/sql data type %TYPE

Use pl/sql data %ROWTYPE.

Table: Empmaster

| No | Name | City |
|----|--------|-----------|
| 10 | Riya | Bombay |
| 20 | Rima | Delhi |
| 30 | Rekha | Bombay |
| 40 | Dhara | Ahemdabad |
| 50 | Dhaval | Jaypur |

```
create table empmaster(no number(10),name varchar2(10),city varchar2(10));
insert into empmaster values('10','Riya','Bombay'); insert into empmaster
values('20','Rima','Delhi'); insert into empmaster values('30','Rekha','Bombay');
insert into empmaster values('40','Dhara','Ahemdabad'); insert into empmaster
values('50','Dhaval','Jaypur'); select *from empmaster;
```

| | NO | NAME | CITY |
|---|----|--------|-----------|
| 1 | 10 | Riya | Bombay |
| 2 | 20 | Rima | Delhi |
| 3 | 30 | Rekha | Bombay |
| 4 | 40 | Dhara | Ahemdabad |
| 5 | 50 | Dhaval | Jaypur |

```
create table citylist(no number(10), name varchar2(10)); select
*from citylist;
```

i)

Query: declare

```
cursor viv is select no,name from empmaster where city='Bombay'; no1
empmaster.no%TYPE;
name1 empmaster.name%TYPE;
```

```
begin open
viv; loop
fetch viv into no1,name1; exit
when viv%NOTFOUND=true;
insert into citylist
values(no1,name1); end loop;
close viv;
end;
```

Output:

| | N | NAME |
|---|----|-------|
| 1 | 10 | Riya |
| 2 | 30 | Rekha |

ii)

Query: declare cursor viv is select no,name from empmaster where city='Bombay'; var viv%ROWTYPE;

```
begin open viv;
loop fetch viv
into var;
exit when viv%NOTFOUND=true;
insert into citylist values(var.no,var.name);
end loop; close viv;
end;
```

Output:

| | N | NAME |
|---|----|-------|
| 1 | 10 | Riya |
| 2 | 30 | Rekha |

5. Write a pl/sql block that update SALARY of employee of a specified company Using parameter in Cursor.

Table : Temp

| No | Company | Salary |
|----|---------|--------|
| 01 | INFOSYS | 18000 |
| 02 | TCS | 22000 |
| 03 | WIPRO | 20000 |
| 04 | ORACLE | 25000 |

```
create table temp(no number(10),company varchar2(10),salary number(10));
insert into temp values('01','INFOSYS',18000); insert into temp
values('02','TCS',22000); insert into temp values('03','WIPRO',20000); insert
into temp values('04','ORACLE',25000); select *from temp;
```

| | NO | COMPANY | SALARY |
|---|----|---------|--------|
| 1 | 1 | INFOSYS | 18000 |
| 2 | 2 | TCS | 22000 |
| 3 | 3 | WIPRO | 20000 |
| 4 | 4 | ORECAL | 25000 |

Query: declare

```
cursor t(name varchar2, amt number) is
select salary from temp where company=name;
cmp temp.company%TYPE; sal
temp.salary%TYPE;
amt number(10);
```

```
begin
cmp:='&cmp';
amt:=&amt; open
t(cmp,amt); loop
fetch t into
sal;
update temp set salary=sal+amt where company=cmp; exit
when t%NOTFOUND=true;
end loop; close t;
end;
```

Output:

Here, value for cmp=WIPRO and amt=2345

| | NO | COMPANY | SALARY |
|---|----|---------|--------|
| 1 | 1 | INFOSYS | 18000 |
| 2 | 2 | TCS | 22000 |
| 3 | 3 | WIPRO | 22345 |
| 4 | 4 | ORACLE | 25000 |

6. Display Only NO,NAME of First three row . Use table Empmaster (Use FOR LOOP) Query: declare

```
cursor c is select no,name from
empmaster; begin
for i in c loop
```

```
if c%ROWCOUNT<=3 then
DBMS_OUTPUT.PUT_LINE(i.no||' '|| i.name);
end if; end
loop; end;
```

output

```
10 Riya
20 Rima
30 Rekha
```