

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

Slip no1: Consider the following entities and their relationships.

Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Emp(eno ,ename ,designation ,salary, Date_Of_Joining)

Dept(dno,dname ,loc)

The relationship between Dept & Emp is one-to-many. Constraints: - Primary Key, ename should not be NULL, salary must be greater than 0.

Solution:-----

```
SQL> create table emp(eno number primary key,ename
varchar(20),designation varchar(20),salary number,date_of_joining
varchar(20));
```

Table created.

```
SQL> desc emp;
```

Name	Null?	Type

ENO	NOT NULL	NUMBER
ENAME		VARCHAR2(20)
DESIGNATION		VARCHAR2(20)
SALARY		NUMBER
DATE_OF_JOINING		VARCHAR2(20)

```
SQL> insert into emp(eno,ename,designation,salary,date_of_joining)
```

```
2 values(1,'Mr. Advait','Assistant',54000,'23/03/2002');
```

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1 row created.

```
SQL> insert into emp(eno,ename,designation,salary,date_of_joining)
```

```
2 values(2,'Mr. Roy','ceo',50000,'15/06/2019');
```

1 row created.

```
SQL> insert into emp(eno,ename,designation,salary,date_of_joining)
```

```
2 values(3,'Mr. Abhay','manager',60000,'10/06/2013');
```

1 row created.

```
SQL> insert into emp(eno,ename,designation,salary,date_of_joining)
```

```
2 values(4,'Mr. Raghav','manager',420000,'01/03/2003');
```

1 row created.

```
SQL> select * from emp;
```

ENO	ENAME	DESIGNATION	SALARY
2	Mr. Roy	ceo	50000
3	Mr. Abhay	manager	60000
4	Mr. Raghav	manager	420000

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1 Mr. Advait Assistant 54000

23/03/2002

2 Mr. Roy ceo 50000

15/06/2019

3 Mr. Abhay manager 60000

10/06/2013

ENO	ENAME	DESIGNATION	SALARY
-----	-------	-------------	--------

DATE_OF_JOINING	PHONE_NO
-----------------	----------

4 Mr. Raghav	manager	420000
--------------	---------	--------

01/03/2003

```
SQL> create table dept(dno number primary key,dname varchar(20),loc  
varchar(10),eno references emp);
```

Table created.

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SQL> desc dept

Name	Null?	Type

DNO	NOT NULL	NUMBER
DNAME		VARCHAR2(20)
LOC		VARCHAR2(10)
ENO		NUMBER

SQL> insert into dept(dno,dname,loc,eno)

2 values(101,'computer','pune',1);

1 row created.

SQL> insert into dept(dno,dname,loc,eno)

2 values(102,'computer science','mumbai',2);

1 row created.

SQL> insert into dept(dno,dname,loc,eno)

2 values(103,'Quqlity','mumbai',3);

1 row created.

SQL>

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```
SQL> insert into dept(dno,dname,loc,eno)
```

```
2 values(104,'Account','mumbai',4);
```

1 row created.

```
SQL> select * from dept;
```

DNO	DNAME	LOC	ENO
101	computer	pune	1
102	computer science	mumbai	2
103	Quqlity	mumbai	3
104	Account	mumbai	4

Q.3 Consider the above tables and Execute the following queries:

1. Add column phone_No into Emp table with data type int.

```
SQL> alter table emp
```

```
2 add phone_no int;
```

Table altered.

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SQL> desc emp;

Name	Null?	Type

ENO	NOT NULL	NUMBER
ENAME		VARCHAR2(20)
DESIGNATION		VARCHAR2(20)
SALARY		NUMBER
DATE_OF_JOINING		VARCHAR2(20)
PHONE_NO		NUMBER(38)

2. Delete the details of Employee whose designation is 'Manager'.

SQL> Delete from emp

2 where designation='manager';

2 rows deleted.

Q4. Consider the above database and execute the following queries: [25 Marks]

1. Display the count of employees department wise.

SQL> select count(emp.eno),dname from emp,dept

2 where emp.eno=dept.eno

3 group by dname;

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COUNT(EMP.ENO) DNAME

1 computer science

1 Account

1 computer

1 Quqlity

- 2. Display the name of employee who is 'Manager' of "Account Department".**

SQL> select ename from emp,dept

2 where emp.eno=dept.eno

3 and designation='manager' and dname='Account';

ENAME

Mr. Raghav

Mr. Abhay

- 3. Display the name of department whose location is "Pune" and "Mr. Advait" is working in it**

SQL> select dname from emp,dept

2 where emp.eno=dept.eno

3 and loc='pune' and ename='Mr. Advait';

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DNAME

Computer

4. Display the names of employees whose salary is greater than 50000 and department is "Quality".

SQL> select ename from emp,dept

2 where emp.eno=dept.eno

3 and salary>50000 and dname='Quqlity';

ENAME

Mr. Abhay

5. Update Dateofjoining of employee to '15/06/2019' whose department is 'computer science' and name is "Mr. Roy".

update emp set date_of_joining='15/06/2019'

where ename='Mr.Roy' and dno in(select dno from dept where dname='computer science');

slip no:2--Q3. Consider the following entities and their relationships. Create a

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Sales_order (ordNo, ordDate)

Client (clientNo, ClientName, addr)

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The relationship between Client & Sales_order is one-to-many.

Constraints: - Primary Key, ordDate should not be NULL

```
SQL> create table client(cno varchar(10) primary key,cname
varchar(20),addr varchar(20));
```

Table created.

```
SQL> desc client
```

Name	Null?	Type

CNO	NOT NULL	VARCHAR2(10)
CNAME		VARCHAR2(20)
ADDR		VARCHAR2(20)

```
SQL> insert into client values('CN001','Abhay','Pune');
```

1 row created.

```
SQL> insert into client values('CN002','Patil','Pune');
```

1 row created.

```
SQL> insert into client values('CN003','Mr.Roy','Pimpri');
```

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1 row created.

```
SQL> insert into client values('CN004','Raj','Mumbai');
```

1 row created.

```
SQL> select * from client;
```

CNO	CNAME	ADDR
CN001	Abhay	Pune
CN002	Patil	Pune
CN003	Mr.Roy	Pimpri
CN004	Raj	Mumbai

```
SQL> create table sales_order(ordno int primary key,ordDate varchar(23)
not null,
```

```
cno varchar(10) references client on delete cascade);
```

Table created.

```
SQL> desc sales_order;
```

Name	Null?	Type

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ORDNO NOT NULL NUMBER(38)

ORDDATE NOT NULL VARCHAR2(23)

CNO VARCHAR2(10)

SQL> insert into sales_order values(1,'23/06/2015','CN001');

1 row created.

SQL> insert into sales_order values(2,'09/03/2019','CN002');

1 row created.

SQL> insert into sales_order values(3,'09/08/2009','CN004');

1 row created.

SQL> insert into sales_order values(4,'09/08/2019','CN002');

1 row created.

SQL> select * from sales_order;

ORDNO	ORDDATE	CNO
--------------	----------------	------------

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1 23/06/2015 CN001

2 09/03/2019 CN002

3 09/08/2009 CN004

4 09/08/2019 CN002

Q.3 Consider the above tables and execute the following queries:

1. Add column amount into Sales_order table with data type int.

SQL> alter table sales_order

2 add amount int;

Table altered.

SQL> desc sales_order;

Name	Null?	Type

ORDNO	NOT NULL	NUMBER(38)
ORDDATE	NOT NULL	VARCHAR2(23)
CNO		VARCHAR2(10)
AMOUNT		NUMBER(38)

2. Delete the details of the clients whose names start with 'A' character.

SQL> delete from client

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2 where cname like 'A%';

1 row deleted.

SQL> select * from client;

CNO	CNAME	ADDR
CN002	Patil	Pune
CN003	Mr.Roy	Pimpri
CN004	Raj	Mumbai

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Delete sales order details of client whose name is “Patil” and order date is “09/08/2019”.

SQL> delete from sales_order

2 where ordDate='09/08/2019'

3 and cno in(select cno from client where cname='Patil');

1 row deleted.

SQL> select * from sales_order;

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ORDNO	ORDDATE	CNO	AMOUNT
-------	---------	-----	--------

2	09/03/2019	CN002	100
3	09/08/2009	CN004	100

2) Change order date of client_No 'CN001' '18/03/2019'.

SQL> update sales_order

2 set ordDate='18/03/2019'

3 where cno='CN001';

0 rows updated.

3) Delete all sales_record having order date is before '10 /02/2018'.

SQL> delete from sales_order

2 where ordDate<'20/10/2019';

2 rows deleted.

4) Display date wise sales_order given by clients.

SQL> select ordDate,ordno,amount,cno from sales_order

2 order by ordDate;

no rows selected

5) Update the address of client to "Pimpri" whose name is 'Mr. Roy'

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SQL> update client

2 set addr='pimpri'

3 where cname='Mr.Roy';

1 row updated.

Slip no-3:-Q3. Consider the following entities and their relationships. Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Hospital (hno ,hname , city, Est_year, addr)

Doctor (dno , dname , addr, Speciality)

**The relationship between Hospital and Doctor is one - to – Many Constraints:
- Primary Key, Est_year should be greater than 1990.**

SQL> create table hospital(hno int primary key,hname varchar(20),city varchar(20),est_year numeric(4) check(est_year>1990),addr varchar(20));

Table created.

SQL> desc hospital;

Name	Null?	Type

HNO	NOT NULL	NUMBER(38)
HNAME		VARCHAR2(20)

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CITY VARCHAR2(20)

EST_YEAR NUMBER(4)

ADDR **VARCHAR2(20)**

```
SQL> insert into hospital values(101,'balaji','pune',1993,'kharadi road');
```

1 row created.

```
SQL> insert into hospital values(103,'vedant','mumbai',1993,'dharavi');
```

1 row created.

```
SQL> insert into hospital values(104,'ruby','pimpri',1993,'kharadi road');
```

1 row created.

```
SQL> insert into hospital values(105,'birla','chinchwad',1993,'tyr');
```

1 row created.

```
SQL> insert into hospital values(106,'qw','pune',1993,'kalptaru');
```

1 row created.

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SQL> select * from hospital;

HNO	HNAME	CITY	EST_YEAR
101	balaji	pune	1993
kharadi road			

103	vedant	mumbai	1993
dharavi			

104	ruby	pimpri	1993
kharadi road			

HNO	HNAME	CITY	EST_YEAR
105	birla	chinchwad	1993
tyr			

106	qw	pune	1993
-----	----	------	------

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kalptaru

```
SQL> create table doctor(dno int primary key,dname varchar(20),addr1  
varchar(20),speciality varchar(20),hno int references hospital on delete  
cascade);
```

Table created.

```
SQL> desc doctor;
```

Name	Null?	Type

DNO	NOT NULL	NUMBER(38)
DNAME		VARCHAR2(20)
ADDR		VARCHAR2(20)
SPECIALITY		VARCHAR2(20)
HNO		NUMBER(38)

```
SQL> insert into doctor values(1,'dr.joshi','pune','skin',104);
```

1 row created.

```
SQL> insert into doctor values(2,'dr.mane','nashik','surgeon',103);
```

1 row created.

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SQL> insert into doctor values(3,'dr.patil','pune','gynecologist',101);

1 row created.

SQL> insert into doctor values(4,'dr.Raghav','pune','skin',105);

1 row created.

SQL> insert into doctor values(5,'dr.Abhay','mumbai','internist',104);

1 row created.

SQL> insert into doctor values(6,'dr.joshi','pune','surgeon',106);

1 row created.

SQL> insert into doctor values(7,'dr.Riya','pune','skin',103);

1 row created.

SQL> insert into doctor values(8,'dr.Gawade','pune','head',104);

1 row created.

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SQL> select * from doctor;

DNO	DNAME	ADDR	SPECIALITY

HNO			

1	dr.joshi	pune	skin
104			
2	dr.mane	nashik	surgeon
103			
3	dr.patil	pune	gynecologist
101			

DNO	DNAME	ADDR	SPECIALITY

HNO			

4	dr.Raghav	pune	skin
105			
5	dr.Abhay	mumbai	internist

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104

6 dr.joshi pune surgeon

106

DNO	DNAME	ADDR	SPECIALITY
-----	-------	------	------------

HNO

7	dr.Riya	pune	skin
---	---------	------	------

103

8	dr.Gawade	pune	head
---	-----------	------	------

104

8 rows selected.

Q.3 Consider the above tables and execute the following queries:

1. Delete addr column from Hospital table.

SQL> alter table hospital

2 drop column addr1;

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2. Display doctor name, Hospital name and specialty of doctors from “Pune City” .

```
SQL> select dname,hname,speciality from doctor,hospital
```

```
2 where doctor.hno=hospital.hno
```

```
3 and city='pune';
```

DNAME	HNAME	SPECIALITY
-------	-------	------------

dr.patil	balaji	gynecologist
----------	--------	--------------

dr.joshi	qw	surgeon
----------	----	---------

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display the names of the hospitals which are located at “Pimpri” city.

```
SQL> select hname from hospital,doctor
```

```
2 where doctor.hno=hospital.hno
```

```
3 and city='pimpri';
```

HNAME

ruby

ruby

ruby

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2. Display the names of doctors who are working in “Birla” Hospital and city name is “Chinchwad”

```
SQL> select dname from doctor,hospital
```

```
2 where doctor.hno=hospital.hno
```

```
3 and hname='birla' and city='chinchwad';
```

DNAME

dr.Raghav

3. Display the specialty of the doctors who are working in “Ruby” hospital.

```
SQL> select speciality from hospital,doctor
```

```
2 where doctor.hno=hospital.hno
```

```
3 and hname='ruby';
```

SPECIALITY

skin

internist

head

4. Give the count of doctor’s hospital wise which are located at “Pimple Gurav”.

```
SQL> select hname,count(dno) from doctor,hospital
```

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2 where doctor.hno=hospital.hno

3 and addr='kharadi road'

4 group by hname;

HNAME	COUNT(DNO)
-------	------------

ruby	3
------	---

balaji	1
--------	---

5. Update an address of Doctor to “Pimpri” whose hospital is “Ruby clinic”

SQL> update doctor set addr1='pimpri'

2 where hno in(select hno from hospital where hname='ruby');

3 rows updated.

Slip no-4:Q3. Consider the following entities and their relationships. Create a

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Patient (PCode, Name, Addr, Disease)

Bed (Bed_No, RoomNo, loc)

Relationship: - There is one-one relationship between patient and bed.

Constraints: - Primary key, RoomNo must be greater than Bed_No, Addr should not be null.

SQL> create table patient(pcode int primary key,name varchar(20) not null,addr varchar(20),disease varchar(10));

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Table created.

SQL> desc patient;

Name	Null?	Type

PCODE	NOT NULL	NUMBER(38)
NAME	NOT NULL	VARCHAR2(20)
ADDR		VARCHAR2(20)
DISEASE		VARCHAR2(10)

SQL> insert into patient values(11,'Raghav','pimple gurav','listeria');

1 row created.

SQL> insert into patient values(12,'Abhay','pune','norovirus');

1 row created.

SQL> insert into patient values(13,'Mr.Roy','mumbai','cholera');

1 row created.

SQL> insert into patient values(14,'Sachin','pimple gurav','dengue');

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1 row created.

```
SQL> insert into patient values(15,'Priya','nashik','listeria');
```

1 row created.

```
SQL> select * from patient;
```

PCODE	NAME	ADDR	DISEASE
11	Raghav	pimple gurav	listeria
12	Abhay	pune	norovirus
13	Mr.Roy	mumbai	cholera
14	Sachin	pimple gurav	dengue
15	Priya	nashik	listeria

```
SQL> create table bed(bno int primary key,rno int not null,loc varchar(10)
not null,pcode int references patient on delete cascade);
```

Table created.

```
SQL> desc bed;
```

Name	Null?	Type
-----	-----	-----

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BNO	NOT NULL NUMBER(38)
RNO	NOT NULL NUMBER(38)
LOC	NOT NULL VARCHAR2(10)
PCODE	NUMBER(38)

SQL> insert into bed values(1,105,'pune',11);

1 row created.

SQL> insert into bed values(2,102,'2nd floor',12);

1 row created.

SQL> insert into bed values(3,103,'4th floor',13);

1 row created.

SQL> insert into bed values(4,104,'1st floor',11);

1 row created.

SQL> insert into bed values(5,105,'3rd floor',14);

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1 row created.

SQL> insert into bed values(6,106,'2nd floor',15);

1 row created.

SQL> select * from bed;

BNO	RNO LOC	PCODE
1	105 pune	11
2	102 2nd floor	12
3	103 4th floor	13
4	104 1st floor	11
5	105 3rd floor	14
6	106 2nd floor	15

6 rows selected.

Q.3 Consider the above tables and execute the following queries:

1. Display the details of patients who are from “Pimple Gurav”

SQL> select * from patient

2 where addr='pimple gurav';

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PCODE	NAME	ADDR	DISEASE
11	Raghav	pimple gurav	listeria
14	Sachin	pimple gurav	dengue

2. Delete the details of patient whose Bed_No is 1 and RoomNo is 105.

```
SQL> select * from patient,bed
```

```
2 where patient.pcode=bed.pcode
```

```
3 and bno=1 and rno=105;
```

PCODE	NAME	ADDR	DISEASE	BNO
11	Raghav	pimple gurav	listeria	1
105	pune	11		

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display the count of patient room wise.

```
SQL> select count(patient.pcode) from patient,bed
```

```
2 where patient.pcode=bed.pcode
```

```
3 group by rno;
```

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COUNT(PATIENT.PCODE)

1

2

1

1

1

2. Display the names of patients who are admitted in room no 101.

SQL> select name from patient,bed

2 where patient.pcode=bed.pcode

3 and rno=102;

NAME

Abhay

3. Display the disease of patient whose bed_No is 1

SQL> select disease from patient,bed

2 where patient.pcode=bed.pcode

3 and bno=1;

DISEASE

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Listeria

4. Display the room_no and bed_no of patient whose name is “Mr Roy”

```
SQL> select rno,bno from patient,bed
```

```
2 where patient.pcode=bed.pcode
```

```
3 and name='Mr.Roy';
```

RNO	BNO
-----	-----

103	3
-----	---

5. Give the details of Patient who is admitted on 2nd flr in roomno 102.

```
SQL> select * from patient,bed
```

```
2 where patient.pcode=bed.pcode
```

```
3 and loc='2nd floor' and rno=102;
```

PCODE	NAME	ADDR	DISEASE	BNO
-------	------	------	---------	-----

RNO	LOC	PCODE
-----	-----	-------

12	Abhay	pune	norovirus	2
----	-------	------	-----------	---

102	2nd floor	12
-----	-----------	----

Slip no-5:Q3. Consider the following entities and their relationships.

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Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Customer (cust_no, cust_name, address, city)

Loan (loan_no, loan_amt)

The relationship between Customer and Loan is Many to Many Constraint:

Primary key, loan_amt should be > 0.

Connected.

```
SQL> create table customer(cno int primary key,cname varchar(20) not null,addr varchar(20),city varchar(10));
```

Table created.

```
SQL> desc customer
```

Name	Null?	Type

CNO	NOT NULL	NUMBER(38)
CNAME	NOT NULL	VARCHAR2(20)
ADDR		VARCHAR2(20)
CITY		VARCHAR2(10)

```
SQL> insert into customer values(101,'Dhiraj','kharadi','pune');
```

1 row created.

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```
SQL> insert into customer values(102,'Patil','kalptaru','pimpri');
```

1 row created.

```
SQL> insert into customer values(103,'Abhay','west','pimpri');
```

1 row created.

```
SQL> insert into customer values(104,'Raghav','rt','nashik');
```

1 row created.

```
SQL> insert into customer values(105,'Dhanu','bvh','pune');
```

1 row created.

```
SQL> select * from customer;
```

CNO	CNAME	ADDR	CITY
101	Dhiraj	kharadi	pune
102	Patil	kalptaru	pimpri
103	Abhay	west	pimpri
104	Raghav	rt	nashik

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105 Dhanu

bvh

pune

SQL> create table loan(lno int primary key,lamt int check(lamt>0),cno int references customer on delete cascade);

Table created.

SQL>

SQL> insert into loan values(1,120000,101);

1 row created.

SQL> insert into loan values(2,100000,102);

1 row created.

SQL> insert into loan values(3,30000,103);

1 row created.

SQL> insert into loan values(4,120,104);

1 row created.

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SQL> insert into loan values(5,1000000,105);

1 row created.

SQL> select * from loan;

LNO	LAMT	CNO
1	120000	101
2	100000	102
3	30000	103
4	120	104
5	1000000	105

Q.3 Consider the above tables and execute the following queries:

1. Add Phone_No column in customer table with data type int.

SQL> alter table customer

2 add phone_no int;

Table altered.

SQL> desc customer

Name	Null?	Type
------	-------	------

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CNO	NOT NULL NUMBER(38)
CNAME	NOT NULL VARCHAR2(20)
ADDR	VARCHAR2(20)
CITY	VARCHAR2(10)
PHONE_NO	NUMBER(38)

2) Delete the details of customer whose loan_amt < 1000.

Delete cno, cname, addr, city, from customer

Where customer.cno = loan.cno

And lamt < 1000;

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Find details of all customers whose loan_amt is greater than 10 lack.

SQL> select * from customer, loan

2 where customer.cno = loan.cno

3 and lamt > 1000000;

no rows selected

2. List all customers whose name starts with 'D' character.

SQL> select * from customer

2 where cname like 'D%';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

CNO	CNAME	ADDR	CITY	PHONE_NO
101	Dhiraj	kharadi	pune	
105	Dhanu	bvh	pune	

3. List the names of customer in descending order who has taken a loan from Pimpri city.

```
SQL> select * from customer
```

```
2 where city='pimpri'
```

```
3 order by cname desc;
```

CNO	CNAME	ADDR	CITY	PHONE_NO
102	Patil	kalptaru	pimpri	
103	hay	west	pimpri	

4.Display customer details having maximum loan amount

```
SQL> select max(lamt) from customer,loan
```

```
2 where customer.cno=loan.cno;
```

MAX(LAMT)

```
-----  
1000000
```

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

5. Update the address of customer whose name is “Mr. Patil” and loan_amt is greater than 100000.

update customer set addr='pune'

where cname='patil' and lno in(select lno from laon where lamt>100000);

Q3. Consider the following entities and their relationships. Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Project (pno, pname, start_date, budget, status) Department (dno, dname, HOD, loc)

The relationship between Project and Department is Many to One.

Constraint: Primary key. Project Status Constraints:

C – Completed,

P - Progressive,

I – Incomplete

SQL> create table project(pno int primary key,pname varchar(20),sdate date,budget int,status varchar(20) check(status in('c','i','p')));

Table created.

SQL> desc project;

Name	Null?	Type

PNO	NOT NULL	NUMBER(38)
PNAME		VARCHAR2(20)

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SDATE

DATE

BBUDGET

NUMBER(38)

STATUS

VARCHAR2(20)

SQL> insert into project values(1,'abc','09/mar/20',2300000,'c');

1 row created.

SQL> insert into project values(2,'xyz','01/apr/18',200000,'i');

1 row created.

SQL> insert into project values(3,'st','23/mar/27',1200000,'p');

1 row created.

SQL> insert into project values(4,'vb','12/feb/20',600000,'c');

1 row created.

SQL> insert into project values(5,'qrt','16/jan/23',3400000,'p');

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> select * from project;

PNO	PNAME	SDATE	BUDGET STATUS
-----	-------	-------	---------------

1	abc	09-MAR-20	2300000 c
---	-----	-----------	-----------

2	xyz	01-APR-18	200000 i
---	-----	-----------	----------

3	st	23-MAR-27	1200000 p
---	----	-----------	-----------

4	vb	12-FEB-20	600000 c
---	----	-----------	----------

5	qrt	16-JAN-23	3400000 p
---	-----	-----------	-----------

SQL> create table department(dno int primary key,dname varchar(20),hod varchar(20),loc varchar(20),pno int references project on delete cascade);

Table created.

SQL> desc department

Name	Null?	Type
------	-------	------

DNO	NOT NULL	NUMBER(38)
-----	----------	------------

DNAME		VARCHAR2(20)
-------	--	--------------

HOD		VARCHAR2(20)
-----	--	--------------

LOC		VARCHAR2(20)
-----	--	--------------

PNO		NUMBER(38)
-----	--	------------

SQL> insert into department values(101,'computer','desai','pune',1);

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row created.

```
SQL> insert into department values(102,'commerce','mane','pune',2);
```

1 row created.

```
SQL> insert into department values(103,'computer','kadam','pune',3);
```

1 row created.

```
SQL> insert into department values(104,'engineering','sam','pune',4);
```

1 row created.

```
SQL> select * from department;
```

DNO	DNAME	HOD	LOC
101	computer	desai	pune
102	commerce	mane	pune

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

2

103 computer	kadam	pune
--------------	-------	------

3

DNO DNAME	HOD	LOC
-----------	-----	-----

PNO

104 engineering	sam	pune
-----------------	-----	------

4

Consider the above tables and execute the following queries:

1. Drop loc column from department table.

alter table department

drop column loc;

2. Display the details of project whose start_date is before one month and status is “Progressive”

SQL> select * from project

2 where sdate>'12/feb/20' and status='p';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

PNO	PNAME	SDATE	BUDGET	STATUS
3	st	23-MAR-27	1200000	p
5	qrt	16-JAN-23	3400000	p

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display the names of project and department who are worked on projects whose status is 'Completed'

SQL>

SQL> Select pname,dname,hod,loc from department,project

2 where department.pno= project.pno

3 and project.status='c';

PNAME	DNAME	HOD
abc	computer	desai
pune		
vb	engineering	sam
pune		

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

2. Display total budget of each department.

SQL> Select sum(budget),dname from department,project

2 where department.pno=project.pno

3 group by dname;

SUM(BUDGET) DNAME

200000 commerce

600000 engineering

3500000 computer

3. Display incomplete project of each department.

SQL> select pname,status ,count(department.dno) from department,project

2 where department.pno=project.pno

3 and project.status='i'

4 group by status,pname;

PNAME STATUS COUNT(DEPARTMENT.DNO)

xyz i 1

4. Display all project working under 'Mr.Desai'.

SQL> Select pname from department,project

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

2 where department.pno=project.pno

3 and hod= 'desai';

PNAME

Abc

5.Display department wise HOD.

SQL> select dname,hod from department,project

2 where department.pno=project.pno

3 order by dname;

DNAME

HOD

commerce

mane

computer

kadam

computer

desai

engineering

sam

slip no_7:Q3. Consider the following entities and their relationships.

Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Room (roomno, desc, rate)

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

Guest (gno, gname, no_of_days)

The relationship between Room and Guest is One to One. Constraint:

Primary key, no of days should be > 0 .

```
SQL> create table room(rno int primary key,des varchar(20),rate
number);
```

Table created.

```
SQL> desc room;
```

Name	Null?	Type

RNO	NOT NULL	NUMBER(38)
DES		VARCHAR2(20)
RATE		NUMBER

```
SQL> insert into room values(101,'A/C',1500);
```

1 row created.

```
SQL> insert into room values(102,'Non A/C',750);
```

1 row created.

```
SQL> insert into room values(103,'A/C',2000);
```

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row created.

SQL> insert into room values(104,'Non A/C',1200);

1 row created.

SQL> select * from room;

RNO	DES	RATE
101	A/C	1500
102	Non A/C	750
103	A/C	2000
104	Non A/C	1200

SQL> create table guest(gno int primary key,gname varchar(20),nod number check (nod>0));

Table created.

SQL> desc guest;

Name	Null?	Type
------	-------	------

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

GNO

NOT NULL NUMBER(38)

GNAME

VARCHAR2(20)

NOD

NUMBER

SQL> insert into guest values(101,'Mr.Bharat',3);

1 row created.

SQL> insert into guest values(102,'Mr.Nilesh',4);

1 row created.

SQL> insert into guest values(103,'Mr.Advait',7);

1 row created.

SQL> insert into guest values(104,'Miss.Sapana',2);

1 row created.

SQL> select * from guest;

GNO GNAME

NOD

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

101 Mr.Bharat	3
102 Mr.Nilesh	4
103 Mr.Advait	7
104 Miss.Sapana	2

Consider the above tables and execute the following queries:

1. Update the rate of room to 5000 whose type is “AC”

SQL> update room set rate=5000

2 where des='A/C';

2 rows updated.

SQL> select * from room;

RNO DES	RATE
-----	-----
101 A/C	5000
102 Non A/C	750
103 A/C	5000
104 Non A/C	1200

2. Display the name of guest who is staying 2 days in roomno 101

select gname from room,guest

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

where room.rno=guest.rno

and nod=2 and rno=101;

Q4. Consider the above tables and execute the following queries: [25 Marks]

- 1. Display room details according to its rates in ascending order**

SQL> select des,rate from room

2 order by des asc;

DES	RATE
A/C	5000
A/C	5000
Non A/C	1200
Non A/C	750

- 2. Display the roomno in which “Mr. Advait” is staying for 7 days**

select rno from room, guest

where room.rno=guest.rno

and gname='Mr.Advait' and nod=7;

- 3. Find no. of AC rooms.**

SQL> select count(rno) from room

2 where des='A/C';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

COUNT(RNO)

2

4. Find names of guest with maximum room charges.

select gname from room,guest

where guest.rno=room.rno

and rate=(select max(rate) from room);

5. Display guest wise halt days.

Select gname,nod from guest

Order by gname;

SQL> Select gname,nod from guest

2 Order by gname;

GNAME	NOD
-------	-----

Miss.Sapana	2
-------------	---

Mr.Advait	7
-----------	---

Mr.Bharat	3
-----------	---

Mr.Nilesh	4
-----------	---

Slip_no 8:Q3. Consider the following entities and their relationships. Create a

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Book (Book_no, title, author, price, year_published) Customer (cid, cname, addr)

Relation between Book and Customer is Many to Many with quantity as descriptive attribute. Constraint: Primary key, price should be >0;

SQL> create table book(bno int primary key,title varchar(10),author varchar(20),

price int check(price>0),yp number);

Table created.

SQL> desc book;

Name	Null?	Type

BNO		NOT NULL NUMBER(38)
TITLE		VARCHAR2(10)
AUTHOR		VARCHAR2(20)
PRICE		NUMBER(38)
YP		NUMBER

SQL> insert into book values(101,'dreams','mr.Raj',150,2017);

1 row created.

SQL> insert into book values(102,'life','mr.Raghav',100,2019);

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row created.

```
SQL> insert into book values(103,'rt story','mr.Gadhav',190,2011);
```

1 row created.

```
SQL> insert into book values(104,'Dad','dr.Sam',200,2001);
```

```
SQL> insert into book values(105,'Struggle','mr.Raj',250,2017);
```

1 row created.

```
SQL> insert into book values(106,'Joker','Mr. Talore',230,2011);
```

1 row created.

```
SQL> select * from book;
```

BNO	TITLE	AUTHOR	PRICE	YP
101	dreams	mr.Raj	150	2017
102	life	mr.Raghav	100	2019
103	rt story	mr.Gadhav	190	2011
104	Dad	dr.Sam	200	2001

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

105 Struggle mr.Raj 250 2017

106 Joker Mr. Talore 230 2011

6 rows selected.

```
SQL> create table customer(cid int primary key,cname varchar(20),addr  
varchar(20),bno int references book);
```

Table created.

```
SQL> desc customer;
```

Name	Null?	Type

CID	NOT NULL	NUMBER(38)
CNAME		VARCHAR2(20)
ADDR		VARCHAR2(20)
BNO		NUMBER(38)

```
SQL> insert into customer values(1,'Abhay','pune',101);
```

1 row created.

```
SQL> insert into customer values(2,'Sam','Mumbai',102);
```

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> insert into customer values(3,'Raghav','pimpri',103);

1 row created.

SQL> insert into customer values(4,'Abhay','mumbai',104);

1 row created.

SQL> insert into customer values(5,'Ganesh','Nashik',105);

1 row created.

SQL> select * from customer;

CID	CNAME	ADDR	BNO
1	Abhay	pune	101
2	Sam	Mumbai	102
3	Raghav	pimpri	103
4	Abhay	mumbai	104
5	Ganesh	Nashik	105

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

```
SQL> create table customerbook(bcid int primary key,bno int references  
book,
```

```
cid int references customer);
```

Table created.

```
SQL> desc customerbook;
```

Name	Null?	Type

BCID		NOT NULL NUMBER(38)
BNO		NUMBER(38)
CID		NUMBER(38)

```
SQL> insert into customerbook values(11,101,1);
```

1 row created.

```
SQL> insert into customerbook values(12,102,2);
```

1 row created.

```
SQL> insert into customerbook values(13,101,3);
```

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> insert into customerbook values(14,103,1);

1 row created.

SQL> insert into customerbook values(15,106,4);

1 row created.

SQL> select * from customerbook;

BCID	BNO	CID
11	101	1
12	102	2
13	101	3
14	103	1
15	106	4

Consider the above tables and execute the following queries:

1.Display the name of book whose author is “Mr. Gadhave”.

SQL> select title from book

2 where author='mr.Gadhave';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

TITLE

rt story

2.Add column EMailId into customer table.

SQL> alter table customer

2 add emailID varchar2(20);

Table altered.

SQL> desc customer;

Name	Null?	Type

CID	NOT NULL	NUMBER(38)
CNAME		VARCHAR2(20)
ADDR		VARCHAR2(20)
BNO		NUMBER(38)
EMAILID		VARCHAR2(20)

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display customer details from 'Mumbai'.

SQL> select * from customer

2 where addr='mumbai';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

CID	CNAME	ADDR	BNO

EMAILID			

4	Abhay	mumbai	104

2. Display author wise details of book.

SQL> select author,title from book

2 order by author;

AUTHOR	TITLE

Mr. Talore	Joker
dr.Sam	Dad
mr.Gadhav	rt story
mr.Raghav	life
mr.Raj	dreams
mr.Raj	Struggle

6 rows selected.

3)Display customer name that has purchased more than 3 books.

SQL> select count(book.bno),cname from customer,book,customerbook

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

2 where customer.cid=customerbook.cid

3 and book.bno=customerbook.bno and book.bno>3

4 group by cname;

COUNT(BOOK.BNO) CNAME

1 Raghav

1 Sam

3 Abhay

3. Display book names having price between 100 and 200 and published year is 2019.

SQL> select book.title from book,customer,customerbook

2 where customer.cid=customerbook.cid

3 and book.bno=customerbook.bno

4 and yp=2019 and price between 100 and 200;

TITLE

life

5. Update the title of book to “DBMS” whose author is “Mr. Talore”.

SQL> update book set title='DBMS'

2 where author='Mr. Talore';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row updated.

SQL> select * from book;

BNO	TITLE	AUTHOR	PRICE	YP
101	dreams	mr.Raj	150	2017
102	life	mr.Raghav	100	2019
103	rt story	mr.Gadhav	190	2011
104	Dad	dr.Sam	200	2001
105	Struggle	mr.Raj	250	2017
106	DBMS	Mr. Talore	230	2011

6 rows selected.

Slip_no:9 Q3. Consider the following entities and their relationships. Create a

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Property (pno, desc, area, rate)

Owner (owner_name, addr, phno) The relationship between owner and Property is One to Many. Constraint: Primary key, rate should be > 0

SQL> create table property(pno int primary key,des varchar(20) not null,area varchar(20) not null,rate int check(rate>0));

Table created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> desc property;

Name	Null?	Type

PNO	NOT NULL	NUMBER(38)
DES	NOT NULL	VARCHAR2(20)
AREA	NOT NULL	VARCHAR2(20)
RATE		NUMBER(38)

SQL> insert into property values(101,'vegr','nashik',1030000);

1 row created.

SQL> insert into property values(102,'tr','Pune',100000);

1 row created.

SQL> insert into property values(103,'vbh','pune',1030000);

1 row created.

SQL> insert into property values(104,'vsdr','mumbai',20000);

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> insert into property values(105,'hjjr','nashik',10000);

1 row created.

SQL> select * from property;

PNO DES	AREA	RATE
101 vegr	nashik	1030000
102 tr	Pune	100000
103 vbh	pune	1030000
104 vsdr	mumbai	20000
105 hjjr	nashik	10000

SQL> create table owner(name varchar(20),addr varchar(20),phno int,pno int references property);

Table created.

SQL> desc owner;

Name	Null?	Type
NAME		VARCHAR2(20)
ADDR		VARCHAR2(20)

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

PHNO

NUMBER(38)

PNO

NUMBER(38)

SQL> insert into owner values('Mr.Mane','Mumbai',1762386534,101);

1 row created.

SQL> insert into owner values('Mr.Patil','Mumbai',1762386534,102);

1 row created.

SQL> insert into owner values('Mr.Joshi','Pune',6892386534,103);

1 row created.

SQL> insert into owner values('Mr.Bhagat','Pune',6876783865,101);

1 row created.

SQL> insert into owner values('Mr.Abhay','Pune',6753386534,104);

1 row created.

SQL> select * from owner;

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

NAME	ADDR	PHNO	PNO

Mr.Mane	Mumbai	1762386534	101
Mr.Patil	Mumbai	1762386534	102
Mr.Joshi	Pune	6892386534	103
Mr.Bhagat	Pune	6876783865	101
Mr.Abhay	Pune	6753386534	104

Consider the above tables and execute the following queries:

1. Display area of property whose rate is less than 100000

SQL> select area from property

2 where rate>100000;

AREA

nashik

pune

2. Give the details of owner whose property is at “Pune”

SQL> select * from owner

2 where addr='Pune';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

NAME	ADDR	PHNO	PNO
------	------	------	-----

Mr.Joshi	Pune	6892386534	103
Mr.Bhagat	Pune	6876783865	101
Mr.Abhay	Pune	6753386534	104

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display area wise property details.

SQL> select area,des from property

2 order by area;

AREA	DES
------	-----

Pune	tr
mumbai	vsdr
nashik	vegr
nashik	hjjr
pune	vbh

2. Display property owned by 'Mr.Patil' having minimum rate.

SQL> select min(rate) from property,owner

2 where property.pno=owner.pno

3 and name='Mr.Patil';

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

MIN(RATE)

100000

3. Delete all properties from “pune” owned by “Mr. Joshi”.

SQL> delete from owner

2 where addr='Pune' and name='Mr.Joshi';

1 row deleted.

SQL> select * from owner;

NAME	ADDR	PHNO	PNO
Mr.Mane	Mumbai	1762386534	101
Mr.Patil	Mumbai	1762386534	102
Mr.Bhagat	Pune	6876783865	101
Mr.Abhay	Pune	6753386534	104

4. Update the phone Number of “Mr. Joshi” to 9922112233 who is having property

at “Uruli Kanchan”

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> update owner set phno=9922112233

2 where addr='Urali Kanchan';

1 row updated.

SQL> select * from owner;

NAME	ADDR	PHNO	PNO
Mr.Mane	Mumbai	1762386534	101
Mr.Patil	Mumbai	1762386534	102
Mr.Bhagat	Pune	6876783865	101
Mr.Abhay	Pune	6753386534	104
Mr.Sam	Urali Kanchan	9922112233	104

5.Delete column address from Owner table.

Alter table owner

drop column addr;

slip_no-10:Q3. Consider the following entities and their relationships. Create a

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Employee (emp_no, name, skill, payrate)

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

Position (posting_no, skill)

The relationship between Employee and Position is Many to Many with day and

shift as descriptive attribute. Constraint: Primary key, payrate should be > 0.

Connected.

```
SQL> create table employee(eno int primary key,name varchar(20),skill  
varchar(20) not null,payrate int check(payrate>0));
```

Table created.

```
SQL> desc employee;
```

Name	Null?	Type

ENO	NOT NULL	NUMBER(38)
NAME		VARCHAR2(20)
SKILL	NOT NULL	VARCHAR2(20)
PAYRATE		NUMBER(38)

```
SQL> insert into employee values(1,'Rghav','manager',23000);
```

1 row created.

```
SQL> insert into employee values(2,'Mane','waiter',23000);
```

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> insert into employee values(3,'Priya','ceo',23000);

1 row created.

SQL> insert into employee values(4,'Abhay','chef',23000);

1 row created.

SQL> select * from employee;

ENO	NAME	SKILL	PAYRATE
1	Rghav	manager	23000
2	Mane	waiter	23000
3	Priya	ceo	23000
4	Abhay	chef	23000

SQL> create table position(pno int primary key,skill varchar(20),eno int references employee);

Table created.

SQL> desc position;

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

Name	Null?	Type
-------------	--------------	-------------

PNO		NOT NULL NUMBER(38)
------------	--	----------------------------

SKILL		VARCHAR2(20)
--------------	--	---------------------

ENO		NUMBER(38)
------------	--	-------------------

SQL> insert into position values(201,'mg',1);

1 row created.

SQL> insert into position values(203,'ceo',2);

1 row created.

SQL> insert into position values(202,'wt',3);

1 row created.

SQL> insert into position values(205,'wdf',4);

1 row created.

SQL> insert into position values(204,'whd',2);

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row created.

SQL> select * from position;

PNO SKILL	ENO
201 mg	1
203 ceo	2
202 wt	3
205 wdf	4
204 whd	2

SQL> create table ep(epno int primary key,eno int references employee,pno int references position);

Table created.

SQL> desc ep;

Name	Null?	Type
EPNO	NOT NULL	NUMBER(38)
ENO		NUMBER(38)
PNO		NUMBER(38)

SQL> insert into ep values(11,1,201);

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

1 row created.

```
SQL> insert into ep values(12,2,202);
```

1 row created.

```
SQL> insert into ep values(13,2,203);
```

1 row created.

```
SQL> insert into ep values(14,3,202);
```

1 row created.

```
SQL> insert into ep values(15,1,204);
```

1 row created.

```
SQL> select * from ep;
```

EPNO	ENO	PNO
11	1	201

DBMS PRACTICAL SLIP ASSIGNMENT-1

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12 2 202

13 2 203

14 3 202

15 1 204

Consider the above tables and execute the following queries:

1. Display skill of employees name wise.

SQL> select name,skill from employee

2 order by name;

NAME	SKILL
------	-------

Abhay	chef
-------	------

Mane	waiter
------	--------

Priya	ceo
-------	-----

Rghav	manager
-------	---------

2)Update the posting of employee to 220 whose skill is “Manager”.

SQL> update position set pno=220

2 where skill='mg';

1 row updated.

SQL> select * from position;

DBMS PRACTICAL SLIP ASSIGNMENT-1

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PNO SKILL	ENO

220 mg	1
203 ceo	2
202 wt	3
205 wdf	4
204 whd	2
208 manager	2

6 rows selected.

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Find the names and rate of pay of all employees who has allocated a duty.

SQL> select name,payrate from employee;

NAME	PAYRATE

Rghav	23000
Mane	23000
Priya	23000
Abhay	23000

DBMS PRACTICAL SLIP ASSIGNMENT-1

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2. Give employee number who is working at posting_no. 201, but don't have the

skill of waiter

SQL> select employee.name,employee.skill from employee,position,ep

2 where employee.eno=ep.eno

3 and position.pno=ep.pno

4 and position.pno=201 and employee.skill not in('waiter');

no rows selected

3)Display a list of names of employees who have skill of chef and who has assigned a duty.

select name from employee,position,ep

where employee.eno=ep.eno

and position.pno=ep.pno

and employee.skill='chef';

4. Display shift wise employee details.

SQL> select name,employee.skill from employee,position,ep

2 where employee.eno=ep.eno

3 and position.pno=ep.pno

DBMS PRACTICAL SLIP ASSIGNMENT-1

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4 group by employee.skill,name;

no rows selected

5. Update payrate of employees to 20000 whose skill is waiter.

SQL> update employee set payrate=20000

2 where skill='waiter';

1 row updated.

SQL> select * from employee;

ENO NAME	SKILL	PAYRATE
1 Rghav	manager	23000
2 Mane	waiter	20000
3 Priya	ceo	23000
4 Abhay	chef	23000

Slip_no:11:Q3. Consider the following entities and their relationships. Create a

RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Bill (billno, day, tableno, total)

Menu (dish_no, dish_desc, price)

DBMS PRACTICAL SLIP ASSIGNMENT-1

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The relationship between Bill and Menu is Many to Many with quantity as descriptive attribute.

Constraint: Primary key, price should be > 0 .

```
SQL> create table bill(bno int primary key not null,day varchar(10),tbno int,
total int);
```

Table created.

```
SQL> desc bill;
```

Name	Null?	Type

BNO	NOT NULL	NUMBER(38)
DAY		VARCHAR2(10)
TBNO		NUMBER(38)
TOTAL		NUMBER(38)

```
SQL> insert into bill values(301,'monday',109,1120);
```

1 row created.

```
SQL> insert into bill values(302,'sunday',123,9120);
```

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

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```
SQL> insert into bill values(303,'tuesday',122,4200);
```

1 row created.

```
SQL> insert into bill values(304,'monday',176,2210);
```

1 row created.

```
SQL> select * from bill;
```

BNO DAY	TBNO	TOTAL

301 monday	109	1120
302 sunday	123	9120
303 tuesday	122	4200
304 monday	176	2210

```
SQL> create table menu(dno int primary key not null, ddes varchar(10), price  
int check(price>0), bno int references bill);
```

Table created.

```
SQL> desc menu;
```

Name	Null?	Type
------	-------	------

DBMS PRACTICAL SLIP ASSIGNMENT-1

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DNO NOT NULL NUMBER(38)

DDES VARCHAR2(10)

PRICE NUMBER(38)

BNO NUMBER(38)

SQL> insert into menu values(101,'veg',200,301);

1 row created.

SQL> insert into menu values(102,'non-veg',300,303);

1 row created.

SQL> insert into menu values(103,'non-veg',400,301);

1 row created.

SQL> insert into menu values(104,'veg',250,301);

1 row created.

SQL> insert into menu values(105,'non-veg',800,302);

DBMS PRACTICAL SLIP ASSIGNMENT-1

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1 row created.

```
SQL> insert into menu values(106,'veg',600,304);
```

1 row created.

```
SQL> select * from menu;
```

DNO DDES	PRICE	BNO

101 veg	200	301
102 non-veg	300	303
103 non-veg	400	301
104 veg	250	301
105 non-veg	800	302
106 veg	600	304

6 rows selected.

```
SQL> create table bm(bmno int primary key,ddate varchar(10),bno int
references bill,mno int references menu);
```

Table created.

```
SQL> desc bm;
```

DBMS PRACTICAL SLIP ASSIGNMENT-1

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Name	Null?	Type
------	-------	------

BMNO		NOT NULL NUMBER(38)
------	--	---------------------

DDATE		VARCHAR2(10)
-------	--	--------------

BNO		NUMBER(38)
-----	--	------------

MNO		NUMBER(38)
-----	--	------------

SQL> insert into bm values(1,'12/02/10',301,102);

1 row created.

SQL> insert into bm values(2,'09/07/19',303,104);

1 row created.

SQL> insert into bm values(3,'02/06/11',302,101);

1 row created.

SQL> insert into bm values(4,'12/02/09',304,102);

1 row created.

SQL> select * from bm;

DBMS PRACTICAL SLIP ASSIGNMENT-1

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BMNO	DDATE	BNO	MNO
1	12/02/10	301	102
2	09/07/19	303	104
3	02/06/11	302	101
4	12/02/09	304	102

Consider the above tables and execute the following queries:

1. Display the tableno whose dish_desc is “Veg”.

```
SQL> select tno from menu, bill, bm
```

```
2 where bill.bno=bm.bno
```

```
3 and menu.mno=bm.mno
```

```
4 and dis='veg';
```

TNO

123

122

2. Display the special menu of Monday.

```
SQL> select dis from bill, menu, bm
```

```
2 where bill.bno=bm.bno
```

```
3 and menu.mno=bm.mno
```

DBMS PRACTICAL SLIP ASSIGNMENT-1

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4 and day='monday';

DIS

non-veg

non-veg

Q4. Consider the above tables and execute the following queries: [25 Marks]

- 1. Display receipt which includes bill_no with Dish description, price, quantity and total amount of each menu.**

SQL> select sum(bill.total),menu.dis,menu.price,bm.qunt from bill,menu,bm

2 where bill.bno=bm.bno

3 and menu.mno=bm.mno

4 group by menu.dis,menu.price,bm.qunt;

SUM(TOTAL) DIS	PRICE	QUNT
-----------------------	--------------	-------------

9120 veg	200	102
-----------------	------------	------------

4200 veg	250	23
-----------------	------------	-----------

1120 non-veg	300	123
---------------------	------------	------------

2210 non-veg	300	312
---------------------	------------	------------

2)Find total amount collected by hotel on date 09/07/2019.

DBMS PRACTICAL SLIP ASSIGNMENT-1

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SQL> select sum(total) from bill,menu,bm

2 where bill.bno=bm.bno

3 and menu.mno=bm.mno

4 and ddate='09/07/19';

SUM(TOTAL)

4200

3)Count number of menus of billno 301

SQL> select count(dis) from bill,menu,bm

2 where bill.bno=bm.bno

3 and menu.mno=bm.mno

4 and bill.bno=301;

COUNT(DIS)

1

4)Display menu details having price between 100 and 500.

SQL> select dis,price from menu

2 where price between 100 and 500;

DIS

PRICE

DBMS PRACTICAL SLIP ASSIGNMENT-1

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veg 200

non-veg 300

non-veg 400

veg 250

5. Display the tableno and day whose bill amount is zero.

SQL> select tno,day from bill

2 where total=0;

no rows selected

slip-no:12 Q3 Consider the following entities and their relationships. Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Movies (M_name, release_year, budget)

Actor (A_name, role, charges, A_address)

Producer (producer_id, name, P_address)

Relationship:- Each actor has acted in one or more movie. Each producer has produced many movies but each movie can be produced by more than one producers.

Each movie has one or more actors acting in it, in different roles.

Constraint: Primary key, release_year > 2000, A_address and P_address should not be same.

Consider the above tables and execute the following queries:

DBMS PRACTICAL SLIP ASSIGNMENT-1

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1. List the names of movies with the highest budget.

2. Display the details of producer who have produced more than one movie in a year.

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. List the names of movies with the second highest budget 2. List the names of actors who have acted in the maximum number of movies.

3. List the names of movies, produced by more than one producer.

4. List the names of actors who are given with the maximum charges for their movie.

5. List the names of actors who have acted in at least one movie, in which 'Akshay' has acted.

Q3. Consider the following entities and their relationships. Create a RDB in 3 NF with appropriate data types and Constraints. [15 Marks]

Driver (driver_id, driver_name, address)

Car (license_no, model, year)

Relation between Driver and Car is Many to Many with date and time as descriptive attribute.

Constraint: Primary key, driver_name should not be null

SQL> create table driver(did int primary key,dname varchar(10),addr varchar(10));

DBMS PRACTICAL SLIP ASSIGNMENT-1

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Table created.

SQL> desc driver;

Name	Null?	Type

DID	NOT NULL	NUMBER(38)
DNAME		VARCHAR2(10)
ADDR		VARCHAR2(10)

SQL> insert into driver values(101,'Raghav','pune');

1 row created.

SQL> insert into driver values(102,'ram','mumbai');

1 row created.

SQL> insert into driver values(103,'Abhay','pune');

1 row created.

SQL> insert into driver values(104,'Ganesh','Nanded');

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

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SQL> insert into driver values(105,'Ritik','Nashik');

1 row created.

SQL> select * from driver;

DID	DNAME	ADDR
101	Raghav	pune
102	ram	mumbai
103	Abhay	pune
104	Ganesh	Nanded
105	Ritik	Nashik

SQL> create table car(lno varchar(10) primary key,model varchar(10),year number,did int references driver);

Table created.

SQL> desc car;

Name	Null?	Type
LNO	NOT NULL	VARCHAR2(10)

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MODEL VARCHAR2(10)

YEAR	NUMBER
------	--------

DID NUMBER(38)

```
SQL> insert into car values('DPU123','w12b',1987,101);
```

1 row created.

```
SQL> insert into car values('DPU781','SUV300',2019,103);
```

1 row created.

```
SQL> insert into car values('DPU231','swif',2001,105);
```

1 row created.

```
SQL> insert into car values('DPU018','ty12',1999,102);
```

1 row created.

```
SQL> insert into car values('DPU810','nh79',2001,104);
```

1 row created.

DBMS PRACTICAL SLIP ASSIGNMENT-1

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```
SQL> select * from car;
```

LNO	MODEL	YEAR	DID
-----	-------	------	-----

DPU123	w12b	1987	101
--------	------	------	-----

DPU781	SUV300	2019	103
--------	--------	------	-----

DPU231	swif	2001	105
--------	------	------	-----

DPU018	ty12	1999	102
--------	------	------	-----

DPU810	nh79	2001	104
--------	------	------	-----

```
SQL> create table dc(dco int primary key,did int references driver,lno  
varchar(10) references car);
```

Table created.

```
SQL> desc dc;
```

Name	Null?	Type
------	-------	------

DCO		NOT NULL NUMBER(38)
-----	--	---------------------

DID		NUMBER(38)
-----	--	------------

LNO		VARCHAR2(10)
-----	--	--------------

```
SQL> insert into dc values(301,101,'DPU123');
```

DBMS PRACTICAL SLIP ASSIGNMENT-1

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1 row created.

SQL> insert into dc values(302,102,'DPU781');

1 row created.

SQL> insert into dc values(303,103,'DPU123');

1 row created.

SQL> insert into dc values(304,101,'DPU018');

1 row created.

SQL> insert into dc values(305,105,'DPU810');

1 row created.

SQL> select * from dc;

DCO	DID	LNO
301	101	DPU123
302	102	DPU781

DBMS PRACTICAL SLIP ASSIGNMENT-1

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303 103 DPU123

304 101 DPU018

305 105 DPU810

Consider the above tables and execute the following queries:

- 1. Display the name of driver whose license no is “DPU123”.**

SQL> select dname from driver,car,dc

2 where driver.did=dc.did

3 and car.lno=dc.lno

4 and car.lno='DPU123';

DNAME

Raghav

Abhay

- 2. Delete the details of car whose model is “swift”.**

SQL> delete from car

2 where model='swif';

1 row deleted.

SQL> select * from car;

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

LNO	MODEL	YEAR	DID
-----	-------	------	-----

DPU123	w12b	1987	101
DPU781	SUV300	2019	103
DPU018	ty12	1999	102
DPU810	nh79	2001	104

Q4. Consider the above tables and execute the following queries: [25 Marks]

1. Display details of all persons who are driving 'Alto' car

```
SQL> select dname from driver,car,dc
```

```
2 where driver.did=dc.did
```

```
3 and car.lno=dc.lno
```

```
4 and model='Alto';
```

DNAME

Ganesh

2. Update model of car to "SUV300" whose manufactured year is 2019.

```
SQL> update car set model='SUV300'
```

```
2 where year=2019;
```

2 rows updated.

DBMS PRACTICAL SLIP ASSIGNMENT-1

SOHAIL SHAIKH | MANDKE COLLEGE

SQL> select * from car;

LNO	MODEL	YEAR	DID

DPU123	w12b	1987	101
DPU781	SUV300	2019	103
DPU018	ty12	1999	102
DPU810	nh79	2001	104
DPU811	Alto	2001	104
DPU701	SUV300	2019	101

6 rows selected.

3.Display car details manufactured before year 2000.

4.In which day 'Mr. Ram' drives maximum number of cars.

SQL> select count(car.model),dname from driver,car,dc

2 where driver.did=dc.did

3 and car.lno=dc.lno

4 and dname='ram'

5 group by dname;

DBMS PRACTICAL SLIP ASSIGNMENT-1

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COUNT(CAR.MODEL) DNAME

1 ram

5.Display total number of drivers who drives car in each year.

SQL> select count(driver.did),year,dname from driver,car,dc

2 where driver.did=dc.did

3 and car.lno=dc.lno

4 group by year,dname;

COUNT(DRIVER.DID) YEAR DNAME

1 1987 Abhay

1 1987 Raghav

1 1999 Raghav

1 2019 ram

2 2001 Ganesh

1 2001 Ritik

6 rows selected.