1. Create the Simple DEPARTMENT Table.

CREATE TABLE dept1(dept_no NUMBER(5), dept_name varchar(20), location varchar(10));

2. Display structure of department table.

desc dept1;

TABLE DEPT1

Column	Null?	Туре
DEPT_NO	-	NUMBER(5,0)
DEPT_NAME	-	VARCHAR2(20)
LOCATION	-	VARCHAR2(10)

3. Insert below records into Department Table.

INSERT INTO dept1 VALUES(10,'Account','NY'); INSERT INTO dept1 VALUES(20,'HR','NY'); INSERT INTO dept1 VALUES(30,'Production','DL'); INSERT INTO dept1 VALUES(40,'Sales','NY'); INSERT INTO dept1 VALUES(50,'EDP','MU'); INSERT INTO dept1 VALUES(60,'TRG','AH'); INSERT INTO dept1 VALUES(110,'RND','');

4. Display all records of Department table.

Select * from dept1;

DEPT_NO	DEPT_NAME	LOCATION
10	Account	NY
20	HR	NY
30	Production	DL
40	Sales	NY
50	EDP	MU
60	TRG	AH
110	RND	-

5. Display all department belonging to location 'NY'.

select * from dept1 WHERE location = 'NY';

DEPT_NO	DEPT_NAME	LOCATION
10	Account	NY
20	HR	NY
40	Sales	NY

6. Display details of Department 10.

select * from dept1 where dept_no = 10;

DEPT_NO	DEPT_NAME	LOCATION
10	Account	NY

7. List all department names starting with 'A'.

select * from dept1 where dept_name like 'A%';

DEPT_NO	DEPT_NAME	LOCATION
10	Account	NY

8. List all departments whose number is between 1 and 100.

select * from dept1 where dept no between 1 and 100;

DEPT_NO	DEPT_NAME	LOCATION
10	Account	NY
20	HR	NY
30	Production	DL
40	Sales	NY
50	EDP	MU
60	TRG	АН

9. Delete 'TRG' department.

delete from dept1 where dept_name = 'TRG';

10. Change department name 'EDP' to 'IT'.

update dept1 set dept_name = 'IT' where dept_name = 'EDP';

SET: 2

1. Create the EMP Table with all necessary constraints such as in EMP TABLE: Employee id should be primary key, Department no should be foreign key, employee age (birthdate) should be greater than 18 years, salary should be greater than zero, email should have (@ and dot) sign in address, designation of employee can be "manager", "clerk", "leader", "analyst", "designer", "coder", "tester".

```
CREATE TABLE EMPLOYEE1
(
empid int primary key,
emp_name varchar(50),
birth_date date,
gender varchar(10),
dept_no int,
address varchar(100),
designation varchar(15) check(designation IN ('manager', 'clerk', 'leader', 'analyst', 'designer', 'coder', 'tester')),
salary int check(salary > 0),
experience int,
email varchar(23) check(email like '%@%.%'),
constraint dept_no foreign key (dept_no) references DEPARTMENT (dept_no)
);
```

2. Create DEPT table with neccessary constraint such as Department no should be primary key, department name should be unique.

```
CREATE TABLE DEPARTMENT1
(
dept_no int primary key,
dept_name varchar(50) unique,
location varchar(15)
```

4. After creation of above tables, modify Employee table by adding the constraints as

5. 'Male' or 'Female' in gender field and display the structure.

alter table EMPLOYEE1 add constraints check_gender check(gender in ('Male','Female'));

6. Insert proper data (at least 5 appropriate records) in all the tables.

Employee1

- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (1, 'Raj', '23-Jun-1999', 'Male', 1010, 'Sahara Darwaja', 'manager', 48950, 25, 'rajpatel@gmail.com');
- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (2,'Amit','23-Apr-1999','Male',2020,'Amroli','clerk',2800,15,'amitkumar@gmail.com');
- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (3, 'Jenisha', '23-Mar-1998', 'Female', 3030, 'Gurugram', 'leader', 4900, 10, 'jeishapatel@gmail.com');
- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (4, 'Samantha', '23-Feb-1999', 'Female', 4040, 'Ring Road', 'analyst', 15000, 1, 'samprabhu@gmail.com');
- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (5, 'Mukesh', '23-Jan-1999', 'Male', 5050, 'Elish Bridge', 'tester', 36200, 18, 'ambani@gmail.com');
- insert into employee1(empid, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email) values (6, 'Vipul', '23-Dec-1999', 'Male', 6060, 'Baben', 'coder', 48950, 25, 'vipulshah@gmail.com');

Department1

- insert into department(dept no,dept name,locations) values (1010, 'Sales', 'Surat');
- insert into department(dept_no,dept_name,locations) values (2020,'Devloping','Vapi');
- insert into department(dept_no,dept_name,locations) values (3030,'Designing','Vyara');
- insert into department(dept_no,dept_name,locations) values (4040, Finance', 'Navsari');
- insert into department(dept_no,dept_name,locations) values (5050,'Marketing','Ahmedabad');
- insert into department(dept_no,dept_name,locations) values (6060,'IT','Bardoli');

7. Describe the structure of table created

desc EMPLOYEE1



desc DEPARTMENT



8. List all records of each table in ascending order.

Select * from employee1 order by empid;

EMPID	EMP_NAME	BIRTH_DATE	GENDER	DEPT_NO	ADDRESS	DESIGNATION	SALARY	EXPERIENCE	EMAIL
1	Raj	23-Jun-1999	Male	1010	Sahara Darwaja	manager	48950	25	rajpatel@gmail.com
2	Amit	23-Apr-1999	Male	2020	Amroli	clerk	2800	15	amitkumar@gmail.com
3	Jenisha	23-Mar-1998	Female	3030	Gurugram	leader	4900	10	jeishapatel@gmail.com
4	Samantha	23-Feb-1999	Female	4040	Ring Road	analyst	15000	1	samprabhu@gmail.com
5	Mukesh	23-Jan-1999	Male	5050	Elish Bridge	tester	36200	18	ambani@gmail.com
6	Vipul	23-Dec-1999	Male	6060	Baben	coder	48950	25	vipulshah@gmail.com
Download	CSV								

Select * from department1 order by dept no;



6 rows selected.

t whose location is Ahmedabad.

Delete from department where location = 'Ahmedabad';

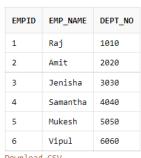
10. Display the female employee list.

Select * from employee1 where gender = 'Female';

EMPID	EMP_NAME	BIRTH_DATE	GENDER	DEPT_NO	ADDRESS	DESIGNATION	SALARY	EXPERIENCE	EMAIL
3	Jenisha	23-Mar-1998	Female	3030	Gurugram	leader	4900	10	jeishapatel@gmail.co
4	Samantha	23-Feb-1999	Female	4040	Ring Road	analyst	15000	1	samprabhu@gmail.com

11. Display the employee department wise.

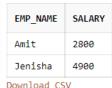
Select empid,emp_name,dept_no from employee order by dept_no;



Download CSV 6 rows selected.

12. Find the names of the employee who has salary less than 5000 and greater than 2000

Select emp_name, salary from employee1 where salary < 5000 and salary > 2000;

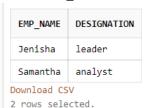


DownToad C2A

2 rows selected.

13. Display the names and the designation of all female employee in descending order.

SELECT EMP_NAME, DESIGNATION FROM EMPLOYEE1 WHERE GENDER IN('Female') order by emp_name



14. Display the names of all the employees who names starts with 'S' ends with 'a'.

select emp_name As "Employee Name" from employee1 where emp_name LIKE('S%a')



15. Find the name of employee and salary for those who had obtain minimum salary.

select emp_name,salary from employee1 where salary = (select min(salary) from employee1)

EMP_NAME	SALARY
Amit	2800

Download CSV

16. Add 10% raise in salary of all employees whose department is 'IT'.

update employee set salary = (salary+(salary/10) where dept_no =(select dept_no from department where dept_name = 'IT');

17. Count total number of employees of 'IT' department.

select count(empid) as 'Employee of IT Department' from employee1 where dept_no =(select dept no from department1 where dept name = 'IT')



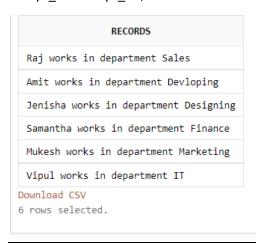
18. List all employees who born in the current month.

Select * from employee1 where TO_CHAR(birth_date, 'MM') = TO_CHAR(CURRENT_DATE, 'MM');

	EMPID	EMP_NAME	GENDER	DEPT_NO	ADDRESS	DESIGNATION	SALARY	EXPERIENCE	EMAIL	BIRTH_DATE
	6	Vipul	Male	6060	Baben	coder	48950	25	vipulshah@gmail.com	23-DEC-99
D	ownload	CSV								

19. Print the record of employee and dept table as "Employee works in department 'MBA'.

select e.emp_name||' works in department '||d.dept_name as Records from employee1 e,department1 d where e.dept_no=d.dept_no;



20. List names of employees who are fresher's (less than 1 year of experience)

select emp_name, experience as "Experience Month Wise" from employee1 where experience < 12;

EMP_NAME	Experience Month Wise			
Jenisha	10			
Samantha 1				
Download CS	V			

2 rows selected.

21. Crete Sequence to generate department ID

```
create sequence myseq
minvalue 1
maxvalue 1000
start with 1
increment by 1;
```

22. List department wise names of employees who has more than 5 years of experience.

select d.dept_name,e.emp_name,e.experience from department1 d,employee1 e where d.dept_no=e.dept_no and e.experience>=5;

DEPT_NAME	EMP_NAME	EXPERIENCE
Sales	Raj	25
Devloping	Amit	15
Designing	Jenisha	10
Marketing	Mukesh	18
IT	Vipul	25

23. . List department having no employees

select dept_name from department1 where dept_no not in(select dept_no from employee1);



5 rows selected.

SET: 3

1. Create the above three tables along with key constraints.

- Create table STUDENT(rollno int primary key, sname varchar(20), class varchar(20), birthdate date);
- Create table COURSE(courseno int primary key, coursename varchar(22),max_marks int, pass_marks int);

```
    Create table stdcourse

            rollno int,
            courseno int,
            marks int,
            constraints rollno foreign key(rollno) references student(rollno),
            constraints courseno foreign key(courseno) references COURSE(courseno)

    );
```

2. Write an Insert script for insertion of rows with substitution variables and insert appropriate data. Student

- insert into student(rollno, sname, class, birthdate) values (1,'Raj Patel','A','23-Jun-99')
- insert into student(rollno, sname, class, birthdate) values (2,'Sristi Patel','A','25-Apr-99')
- insert into student(rollno, sname, class, birthdate) values (3,'Smit Shah','B','10-Mar-01')
- insert into student(rollno, sname, class, birthdate) values (4,'Amit Singh','B','11-Feb-97')

- insert into student(rollno, sname, class, birthdate) values (5, 'Pirjada Abarar', 'C', '25-Dec-98')
- insert into student(rollno, sname, class, birthdate) values (6,'Naveen Panjala','D','16-Sep-00')
- insert into student(rollno, sname, class, birthdate) values (7, 'Jenish Taniya', 'C', '03-Jul-01')
- insert into student(rollno, sname, class, birthdate) values (8,'Ashita Patel','C','03-Aug-01')
- insert into student(rollno, sname, class, birthdate) values (9,'Dhriti Taniya','C','03-Feb-02')
- insert into student(rollno, sname, class, birthdate) values (10, 'Sristi Avaiya', 'C', '03-May-01')
- insert into student(rollno, sname, class, birthdate) values (11,'Vipul Patel','C','03-May-80')
- insert into student(rollno, sname, class, birthdate) values (12, 'Sorathiya Sameer', 'C', '03-May-82')

Course

- insert into course values(101, 'python', '100', '36');
- insert into course values(102,'dbms','50','15');
- insert into course values(103,'com_network','70','26');
- insert into course values(104,'data_structure','60','36');
- insert into course values(105,'java','90','20');

Stdcourse

- insert into stdcourse(rollno, courseno, marks) values (1,101,76)
- insert into stdcourse(rollno, courseno, marks) values (1,102,86)
- insert into stdcourse(rollno, courseno, marks) values (2,103,36)
- insert into stdcourse(rollno, courseno, marks) values (3,104,56)
- insert into stdcourse(rollno, courseno, marks) values (4,105,56)
- insert into stdcourse(rollno, courseno, marks) values (5,101,40)
- insert into stdcourse(rollno, courseno, marks) values (6,102,20)
- insert into stdcourse(rollno, courseno, marks) values (7,103,96)
- insert into stdcourse(rollno, courseno, marks) values (8,104,56)
- insert into stdcourse(rollno, courseno, marks) values (9,105,86)
- insert into stdcourse(rollno, courseno, marks) values (10,101,66)

3. Add a constraint that the marks entered should strictly be between 0 and 100.

ALTER TABLE stdcourse

ADD CONSTRAINT marks check(marks > 0 AND marks < 100);

4. While creating SC table, composite key constraint was forgotten. Add the composite keynow.

ALTER TABLE stdcourse

ADD CONSTRAINT composite primary key(rollno,courseno);

5. Display details of student who takes 'Database Management System' course.

select * from student where rollno IN (select rollno from stdcourse where courseno = (select courseno from course where coursename = 'dbms'));

ROLLNO	SNAME	CLASS	BIRTHDATE
6	Naveen Panjala	D	16-SEP-06
1	Raj Patel	Α	23-JUN-99

6. Display the names of students who have scored more than 70% in Computer Networksand have not failed in any subject.

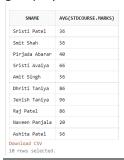
select stdcourse.rollno, coursename, student.sname from course,stdcourse,student where stdcourse.courseno = course.courseno and marks > 70 and coursename='com_network' and stdcourse.rollno not in

(select rollno from stdcourse, course where marks < course.pass_marks) and student.rollno= stdcourse.rollno order by rollno;

ROLLNO	COURSENAME	SNAME	
7	com_network	Jenish Taniya	

7. Display the average marks obtained by each student.

select student.sname , AVG(stdcourse.marks) from student , stdcourse where student.rollno = stdcourse.rollno group by student.sname



8. Select all courses where passing marks are more than 30% of average maximum mark.

select * from course where pass marks > 30 * (select avg(max marks) from course)/100;

COURSENO	COURSENAME	MAX_MARKS	PASS_MARKS
101	python	100	36
103	com_network	70	26
104	data_structure	60	36

Download CSV 3 rows selected.

9. Displaydetails of students who arebornin 1980 or 1982.

select * from student where EXTRACT(Year FROM birthdate) = 1982 or EXTRACT(Year FROM birthdate) = 1980;

ROLLNO	SNAME	CLASS	BIRTHDATE
11	Vipul Patel	С	03-MAY-80
12	Sorathiya Sameer	С	03-MAY-82

10. Create a view that displays student courseno and its corresponding marks

create view student_view as

select c.courseno,c.coursename,s.marks from course c,stdcourse s where c.courseno = s.courseno;

SET: 4

Department Table

```
Create table DEPARTMENT (
dept_no int primary key,
dept_name varchar(20),
total_employees int,
location varchar(20)
)
```

- insert into DEPARTMENT values(101, 'MCA', 10, 'Surat');
- insert into department values(102,'CE',15,'Navsari');
- insert into department values(103, 'CIVIL', 20, 'Daman');
- insert into department values(104, 'ELECTRICAL', 25, 'Silvasa');
- insert into department values(105,'AUTOMOBILE',5,'Vapi');
- insert into department values(106,'IT',0,'PUNE');

```
> Employee Table
            CREATE table EMPLOYEE
            emp id int primary key,
            emp_name varchar(20),
            birth_date date,
            gender varchar(10) check(gender IN ('OTHER', 'Other', 'FEMALE', 'Female', 'male', 'MALE')),
            dept no int,
            address varchar(50),
            designation varchar(20),
            salary int,
            experience float,
            email varchar(30) check(email like '%@%.%'),
            constraint dept_no foreign key (dept_no) references DEPARTMENT (dept_no)
            )
  insert into EMPLOYEE values(1,'Raj','23-june-
    1999', 'male', 101, 'Surat', 'Manager', 15600, 3, 'rpatel@gmail.com');
  insert into EMPLOYEE values(2,'Amisha','13-july-
   1998', 'Female', 101, 'Vapi', 'CEO', 35600, 1.2, 'apatel@gmail.com');

    insert into EMPLOYEE values(3,'Naveen','3-june-

   1990', 'male', 101, 'Daman', 'MD', 45600, 0.2, 'npatel@gmail.com');
   insert into EMPLOYEE values(4, 'Jenish', '1-may-1989', 'male', 101, 'Valsad', 'AD', 5600, 1.9, 'jpatel@gmail.com');
   insert into EMPLOYEE values(5,'Smit','25-aug-
    1982', 'male', 101, 'Silvasa', 'Developer', 35600, 5.5, 'spatel@gmail.com');
   insert into EMPLOYEE values(6,'Shyam','23-june-
    1999', 'male', 102, 'Surat', 'Manager', 11600, 1, 'rpatel@gmail.com');
  insert into EMPLOYEE values(7,'Chanchal','13-july-
    1998', 'Female', 102, 'Vapi', 'CEO', 36600, 2.2, 'apatel@gmail.com');
• insert into EMPLOYEE values(8,'Tanu','3-june-
   1990', 'Female', 102, 'Daman', 'MD', 25600, 3.2, 'npatel@gmail.com');
  insert into EMPLOYEE values(9,'Mukesh','1-may-
   1989', 'male', 102, 'Valsad', 'AD', 20300, 4.9, 'jpatel@gmail.com');
   insert into EMPLOYEE values(10, 'Parth', '25-aug-
   1982', 'male', 102, 'Silvasa', 'Developer', 10600, 10.5, 'spatel@gmail.com');
  insert into EMPLOYEE values(11, 'Ghanshyam', '23-june-
    1999', 'male', 102, 'Surat', 'Manager', 22600, 1, 'rpatel@gmail.com');
  insert into EMPLOYEE values(12, 'Era', '13-july-1998', 'Female', 102, 'Vapi', 'CEO', 23600, 2.2, 'apatel@gmail.com');
   insert into EMPLOYEE values(13, 'Radha', '3-june-
    1990', 'Female', 102, 'Daman', 'MD', 19600, 3.2, 'npatel@gmail.com');
  insert into EMPLOYEE values(14,'Amish','1-may-
    1989', 'male', 103, 'Valsad', 'AD', 50360, 4.9, 'jpatel@gmail.com');
   insert into EMPLOYEE values(15, 'Pinkesh', '25-aug-
    1982', 'male', 103, 'Silvasa', 'Developer', 95600, 10.5, 'spatel@gmail.com');
   insert into EMPLOYEE values(16, 'Hiren', '23-june-
   1999', 'male', 104, 'Surat', 'Manager', 55600, 1, 'rpatel@gmail.com');

    insert into EMPLOYEE values(17, 'Sonalika', '13-july-

    1998', 'Female', 104, 'Vapi', 'CEO', 65600, 2.2, 'apatel@gmail.com');
   insert into EMPLOYEE values(18, 'Mahi', '3-june-
    1990', 'Female', 104, 'Daman', 'MD', 85600, 3.2, 'npatel@gmail.com');
```

- insert into EMPLOYEE values(19, 'Pinku', '1-may-1989', 'male', 104, 'Valsad', 'AD', 12600, 4.9, 'jpatel@gmail.com');
- insert into EMPLOYEE values(20, 'Gogi', '25-aug-1982', 'male', 105, 'Silvasa', 'Developer', 18600, 10.5, 'spatel@gmail.com');
- Project Table

```
Create table PROJECT
(
proj_id int,
type_of_project varchar(20),
status varchar(20),
start_date date,
constraint emp_id foreign key (emp_id) references EMPLOYEE(emp_id)
);
```

- insert into Project values(1001, 'On Site', 'Pending', '23-Oct-2020', 1);
- insert into Project values(1002, 'At Office', 'IN Proccess', '23-Nov-2018', 2);
- insert into Project values(1003, 'On Site', 'Complated', '23-Jan-2021', 3);
- insert into Project values(1004, 'At Office', 'Debuging', '23-Mar-2015', 4);
- insert into Project values(1001, 'On Site', 'Pending', '23-Oct-2020',5);
- insert into Project values(1002, 'At Office', 'IN Proccess', '23-Nov-2018',6);
- insert into Project values(1003, 'On Site', 'Complated', '23-Jan-2021', 7);
- insert into Project values(1004, 'At Office', 'Debuging', '23-Mar-2015', 8);
- insert into Project values(1001, 'On Site', 'Pending', '23OctDec-2020',9);
- insert into Project values(1002, 'At Office', 'IN Proccess', '23-Nov-2018', 10);
- insert into Project values(1003, 'On Site', 'Complated', '23-Jan-2021', 11);
- insert into Project values(1004, 'At Office', 'Debuging', '23-Mar-2015', 12);
- insert into Project values(1001, 'On Site', 'Pending', '23-Oct-2020', 13);
- insert into Project values(1002, 'At Office', 'IN Proccess', '23-Nov-2018', 14);
- insert into Project values(1003, 'On Site', 'Complated', '23-Jan-2021', 15);
- insert into Project values(1004, 'At Office', 'Debuging', '23-Mar-2015', 16);
- insert into Project values(1001, 'On Site', 'Pending', '23-Oct-2020', 17);
- insert into Project values(1002, 'At Office', 'IN Proccess', '23-Nov-2018', 18);
- insert into Project values(1003, 'On Site', 'Complated', '23-Jan-2021', 19);
- insert into Project values(1004, 'At Office', 'Debuging', '23-Mar-2015', 20);

1. Delete the department whose total number of employees less than 1.

delete from department where total_employees < 1;

2. Display the names and the designation of all female employee in descending order.

select emp_name ,designation from employee where gender = 'Female' order by emp_name DESC;

DESIGNATION
MD
CEO
MD
MD
CEO
CEO
CEO

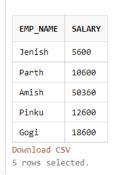
3.Display the names of all the employees who names starts with 'A' ends with 'A'.

select emp_name from employee where emp_name like 'A%a';



4. Find the name of employee and salary for those who had obtain minimum salary.

select emp_name,salary from employee where salary in(select min(salary)from employee group by dept_no);



5. Count total number of employees of 'MCA' department.

select dept name, total employees from department where dept name = 'MCA';



6.Add 10% raise in salary of all employees whose department is 'CIVIL'

update employee set salary = salary +((salary /100)*10) where dept_no = (select dept_no from department where dept_name = 'CIVIL')

7. List all employees who born in the current month.

select * from employee where extract(month from birth_date) = (SELECT TO_CHAR (SYSDATE, 'MM') FROM DUAL);

EMP_ID	EMP_NAME	BIRTH_DATE	GENDER	DEPT_NO	ADDRESS	DESIGNATION	SALARY	EXPERIENCE	EMAIL
19	Pinku	25-DEC-90	male	104	Valsad	AD	12600	4.9	jpatel@gmail.com
20	Gogi	31-DEC-98	male	105	Silvasa	Developer	18600	10.5	spatel@gmail.com

8. Print the record of employee and dept table as "Employee works in department 'CE'.

select emp.emp_name,emp.dept_no,dept.dept_name from employee emp,department dept where dept.dept_no = emp.dept_no and dept.DEPT_NAME = 'CE';

EMP_NAME	DEPT_NO	DEPT_NAME
Shyam	102	CE
Chanchal	102	CE
Tanu	102	CE
Mukesh	102	CE
Parth	102	CE
Ghanshyam	102	CE
Era	102	CE
Radha	102	CE

9. List names of employees who are fresher's (less than 1 year of experience).

select emp_name, EXPERIENCE from employee where EXPERIENCE <= 1;

EMP_NAME	EXPERIENCE
Naveen	.2
Shyam	1
Ghanshyam	1
Hiren	1

10.List department wise names of employees who has more than 5 years of experience.

select emp.emp_name, dept.dept_name,emp.experience from employee emp,department dept where dept.dept_no = emp.dept_no and emp.experience > 5;

DEPT_NAME	EXPERIENCE
MCA	5.5
CE	10.5
CIVIL	10.5
AUTOMOBILE	10.5
	MCA CE CIVIL

Download CSV 4 rows selected.

SET:5

➤ Hostel

CREATE TABLE hostel(hno number(5)primary key, hname varchar(30)unique, haddr varchar(50), total_capacity number(5), warden varchar(20));

Room

CREATE TABLE room(
hno number(5)references hostel(hno),
rno number(5)primary key,
rtype varchar(30) not null,
location varchar(50),
no_of_student number(5) CHECK (no_of_student >= 0), status varchar(50));

Charges

CREATE TABLE charges(hno number(5)references hostel(hno), rtype varchar(30), charges number(10));

Student

CREATE TABLE student(
sid number(5)primary key,
sname varchar(20) not null,
mobile number(10),
gender varchar(15) CHECK (gender in('male','female')),
faculty varchar(30),
dept varchar(30),
class varchar(20),
hno number(5) references hostel(hno),
rno number(5) references room(rno));

> Fees

Create table fees(
sid number(5)references student(sid),
fdate date not null,
famount number(10) CHECK (famount > 0));

Hostel

- insert into hostel values(101, 'Suman Nivas', 'ADAJAN', 25, 'Jamandas Ghariwala');
- insert into hostel values(102, 'Chhagan Nivas', 'Rander', 50, 'Ramaniklal Chunawala');
- insert into hostel values(103, 'Magan Nivas', 'CityLight', 75, 'Chunilal Gajiwala');
- insert into hostel values(104, 'Gagan Nivas', 'Parle Point', 100, 'Chhabildas Gheewala');
- insert into hostel values(105, 'Jagat Nivas', 'Athwa Lines', 120, 'ChimanLal Jariwala');

Room

- insert into room values (101,'0001','single seated','surat',3,'vacant');
- insert into room values (102,'0002','double seated','vapi',3,'occupied');
- insert into room values (103,'0003','single seated','navsari',1,'vacant');
- insert into room values (104,'0004','double seated','ankleshwar',4,'occupied');
- insert into room values (105,'0005','single seated','bilimora',2,'vacant');
- insert into room values (103,'0006','single seated','navsari',1,'vacant');
- insert into room values (102,'0007','double seated','vapi',3,'vacant');
- insert into room values (103,'0008','double seated','navsari',2,'vacant');
- insert into room values (104,'0009','single seated','ankleshwar',1,'vacant');
- insert into room values (103,'00010','double seated','navsari',2,'vacant');

charges

- insert into charges values (101, 'single seated', 1000);
- insert into charges values (101, 'double seated', 2000);
- insert into charges values (102, 'single seated', 2000);
- insert into charges values (102,'double seated',2000);
- insert into charges values (103, 'single seated', 2000);
- insert into charges values (103, 'double seated', 2000);
- insert into charges values (104, single seated', 1000);
- insert into charges values (104, 'double seated',2000);
- insert into charges values (105, 'single seated', 1000);
- insert into charges values (105, 'double seated', 2000);

Student

- insert into std values(1, 'Tapu Jethalal Gada',9913652920, 'male', 'Jethalal Gadda', 'Medical', 'FY',101,0001);
- insert into std values(2, 'Sonu Atmaram Bhide', 8779654776, 'female', 'Madhavi Atmaram Bhide', 'Nursing', 'SY', 102,0002);
- insert into std values(3, 'Goli Hanshraj Hathi',9879952932, 'male', 'Anjali Tarak Mehta', 'Enginnering', 'TY',103,0003);
- insert into std values(4, 'Gogi Sodhi', 7679654706, 'male', 'Komal Hathi', 'Medical', 'SY', 104,0004);
- insert into std values(5,'Pinku',4579855678,'male','Roshan Sodhi','Commarce','TY',105,0005);
- insert into std values(6,'Daya Jethalal Gadda',9878954707,'female','Jethalal Gadda','IT','SY',101,0001);
- insert into std values(7, 'Babita lyer', 9878854707, 'female', 'Madhavi Atmaram Bhide', 'Chemical', 'FY', 102,0002);
- insert into std values(8, 'Popatlal Pande', 9913652963, 'female', 'Anjali Tarak Mehta', 'Software', 'SY', 103,0003);
- insert into std values(9,'Krishanan Iyet',9879857899,'male','Madhavi Atmaram Bhide','Ehemestry','TY',102,0002);
- insert into std values(10, Tarak Mehta', 786754667, 'male', 'Komal Hathi', 'Engineering', 'FY', 104,0004);

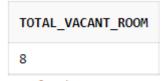
Fees

- insert into fees values (1,'05-jul-2020',15000);
- insert into fees values (2,'05-jul-2020',25000);
- insert into fees values (3,'03-aug-2020',25000);
- insert into fees values (4,'03-aug-2020',20000);

- insert into fees values (5,'10-jul-2020',13000);
- insert into fees values (6,'10-aug-2020',25000);
- insert into fees values (7,'21-jul-2020',20000);
- insert into fees values (8,'20-aug-2020',49000);
- insert into fees values (9,'01-aug-2020',23000);
- insert into fees values (01,'05-sep-2020',29000);

1.Display the total number of rooms that are presently vacant. Ans.

select count(*)As Total_Vacant_Room from room where status = 'vacant';



2. Display number of students of each faculty and department wise staying in each hostel.

select room.no_of_student,room.hno,student.faculty,student.dept from room, student where student.hno=room.hno and student.rno=room.rno;

NO_OF_STUDENT	HNO	FACULTY	DEPT
4	104	Komal Hathi	Medical
3	101	Jethalal Gadda	Medical
3	102	Madhavi Atmaram Bhide	Nursing
1	103	Anjali Tarak Mehta	Enginnering
2	105	Roshan Sodhi	Commarce
3	101	Jethalal Gadda	IT
3	102	Madhavi Atmaram Bhide	Chemical
1	103	Anjali Tarak Mehta	Software
3	102	Madhavi Atmaram Bhide	Ehemestry
4	104	Komal Hathi	Engineering

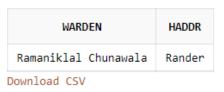
3. Display hostels, which have at least one single-seated room.

select h.hno,h.hname,r.rtype from hostel h,room r where h.hno = r.hno and r.rtype = 'single seated';



4. Display the warden name and hostel address of students of Computer Science department.

select h.warden,h.haddr from hostel h,student s where s.dept='computer science' and s.hno = h.hno;



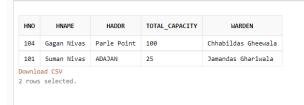
5. Display those hostel details where single seated or double-seated rooms are vacant.

select h.hno,h.hname,r.rno,r.rtype,r.status from hostel h,room r where (r.rtype='single seated' or r.rtype='double seated') and r.status = 'vacant' and h.hno=r.hno;

HNO	HNAME	RNO	RTYPE	STATUS
101	Suman Nivas	1	single seated	vacant
103	Magan Nivas	3	single seated	vacant
105	Jagat Nivas	5	single seated	vacant
103	Magan Nivas	6	single seated	vacant
102	Chhagan Nivas	7	double seated	vacant
103	Magan Nivas	8	double seated	vacant
104	Gagan Nivas	9	single seated	vacant
103	Magan Nivas	10	double seated	vacant

6. Display details of hostels occupied by medical students.

select h.hno,h.hname,h.haddr,h.total_capacity,h.warden from hostel h,student s where s.dept='medical' and s.hno=h.hno;



8.List details about students who are staying in the double-seated rooms of Chanakya Hostel.

select s.sid,s.sname,s.mobile,s.gender,s.faculty,s.dept from student s,room r,hostel h where r.rtype='double seated' and h.hname='chanakya' and s.rno = r.rno and r.hno = h.hno;



9. Display the total number of students staying in each room type of each hostel.

select s.hno,s.rno,count(sid)as Total_Students from student s, hostel h where h.hno=s.hno group by s.hno,s.rno;

HNO	RNO	TOTAL_STUDENTS
101	1	2
104	4	2
103	3	2
102	2	3
105	5	1

12. Display hostel details where there are at least 10 vacant rooms.

select hno,hname, Warden from hostel where hno in (select hno from room group by hno having count(status)>=3);

HNO	HNAME	WARDEN
103	Magan Nivas	Chunilal Gajiwala

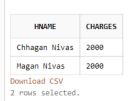
13. Display details of students who have still not paid fees.

select sid, sname from student where sid not in (select sid from fees);



14. Display those hostels where single-seated room is the costliest.

select h.hname,c.charges from hostel h,charges c where c.charges = (select max(charges) from charges) and h.hno=c.hno and c.rtype = 'single seated';



SET 6

Doctor

CREATE TABLE doctor(
dno number(5)primary key,dname varchar(50),
spec varchar(50),clinic_add varchar(100));

Medicine

CREATE TABLE medicine(mno number(5)primary key,mname varchar(50), type varchar(50),content varchar(50),manufac date);

Disease

CREATE TABLE disease(dname varchar(50), symptom1 varchar(50),symptom2 varchar(50), symptom3 varchar(50));

• Treatment

CREATE TABLE treatment(tno number(5)primary key, dno number(5) references doctor(dno), dname varchar(50),mno number(5) references medicine(mno), dosage number(5), avg_cure_time varchar(50));

Doctor:

- insert into doctor values(1,'Dr.urvisha','aye spaci.','surat');
- insert into doctor values(2,'Dr.Mohan misrtry','sarjan','vadodra');
- insert into doctor values(3, 'Dr.Ankush shah', 'legs spaci.', 'vapi');
- insert into doctor values(4,'Dr.Akash vyas','bone spaci.','chennai');
- insert into doctor values(5, 'Dr.dilip kyara', 'skin spaci.', 'ankleshwar');
- insert into doctor values(6, 'Dr.shah', 'nuro serjan', 'mumbai');

Medicine

- insert into medicine values(10,'dolo','painkiler','low power','21-jun-2021');
- insert into medicine values(20, 'dristic', 'fear', 'paracitemol', '10-mar-2021');
- insert into medicine values(30, 'italic', 'deises', 'aisid', '10-july-2021');
- insert into medicine values(40, 'trident', 'cold', 'clorin', '08-oct-2021');

insert into medicine values(50, 'aciin'', 'mantality', 'frit', '14-nov-2021');

Disease

- insert into disease values('polio','cold','fever','cough');
- insert into disease values('migraines','mind blind','low energy','-');
- insert into disease values('corona','cold','fever','low energy');
- insert into disease values('meleriya','body pain','fever','low energy');
- insert into disease values('cold fever','cold','fever','hotness');
- insert into disease values('Cancer','Vommiting','Blood Loss','reaction on body');

Treatment

- insert into treatment values(1,1, 'migraines',20,9,'4 days');
- insert into treatment values(2,2,'cold fever',50,5,'daily');
- insert into treatment values(3,4,'cancer',10,10,'1 year');
- insert into treatment values(4,3,'corona',50,3,'14 days');
- insert into treatment values(5,5,'polio',40,1,'15 days');
- insert into treatment values(6,6,'cold fever',10,3,'12 days');
- insert into treatment values(7,4,'polio',30,2,'7 day');
- insert into treatment values(8,6, 'meleriya',40,4,'2 week');
- insert into treatment values(9,6,'liver',50,10,'2 month');

1.Display records of each table in ascending order. Ans.

select * from doctor order by dno asc;

DNO	DNAME	SPEC	CLINIC_ADD
1	Dr.urvisha	aye spaci.	surat
2	Dr.Mohan misrtry	sarjan	vadodra
3	Dr.Ankush shah	legs spaci.	vapi
4	Dr.Akash vyas	bone spaci.	chennai
5	Dr.dilip kyara	skin spaci.	ankleshwar
6	Dr.shah	nuro serjan	mumbai

30 trident cold

MNO

10

20

MNAME

dristic

italic

dolo

40	trident	cold	clorin	08-0CT-21
50	aciin,	mantality	frit	14-NOV-21

select * from medicine order by mno asc;

CONTENT

low power

aisid

paracitemol

MANUFAC

21-JUN-21

10-MAR-21

10-JUL-21

TYPE

painkiler

fear

deises

select * from disease order by dname asc;

DNAME	SYMPTOM1	SYMPTOM2	SYMPTOM3
Cancer	Vommiting	Blood Loss	reaction on body
cold fever	cold	fever	hotness
corona	cold	fever	low energy
meleriya body pain		fever	low energy
migraines	mind blind	low energy	7 2 3
polio	cold	fever	cough

select * from treatment order by tno asc;

TNO	DNO	DNAME	MNO	DOSAGE	AVG_CURE_TIME
1	1	migraines	20	9	4 days
2	2	cold fever	50	5	daily
3	4	cancer	10	10	1 year
4	3	corona	50	3	14 days
5	5	polio	40	1	15 days
6	6	cold fever	10	3	12 days
7	4	polio	30	2	7 day
8	6	meleriya	40	4	2 week
9	6	liver	50	10	2 month

2. Count total number of doctors which has not given any treatment.

select count(*)as No_OF_DR_Not_Treatment from doctor where dno not in (select dno from treatment);

NO_OF_DR_NOT_TREATMENT	
0	

3. Display all Chennai doctors who treat cancer.

select d.dno,d.dname,t.dname from doctor d,treatment t where t.dname = 'cancer' and clinic add = 'chennai';

DNO	DNAME	DNAME
4	Dr.Akash vyas	cancer

4.Remove disease "polio" from disease table as well as treatment table. Ans.

delete from disease where dname = 'polio';

5. Delete all those treatment related to liver of Dr. Shah.

delete from treatment where dno = (select dno from doctor where dname = 'Dr.shah') and dname = 'liver';

6.Create index on dno, Disease name in the treatment table. Ans.

CREATE INDEX id on treatment (dno,dname);

7. Display details of doctors who treat migraines.

select * from doctor where dno in (select dno from treatment t, disease d where t.dname = 'migraines' and d.dname = 'migraines');

DNO	DNAME	SPEC	CLINIC_ADD
1	Dr.urvisha	aye spaci.	surat

8. What is the maximum dosage of "penicillin" prescribe by the doctor for the treatment of any disease?

select max(dosage)as Maximum_dosage from treatment where mno in (select mno from medicine where mname = 'penicillin');



9. Display total number of disease treated by every doctor.

select dno,count(dname)as No_Of_Disease from treatment group by dno;

DNO	NO_OF_DISEASE
6	2
1	1
2	1
4	2
5	1
3	1

10. Which doctor have no treatment for "depression"?

select * from doctor where dno not in (select dno from treatment where dname = 'depression');

DNO	DNAME	SPEC	CLINIC_ADD
1	Dr.urvisha	aye spaci.	surat
2	Dr.Mohan misrtry	sarjan	vadodra
3	Dr.Ankush shah	legs spaci.	vapi
5	Dr.dilip kyara	skin spaci.	ankleshwar
6	Dr.shah	nuro serjan	mumbai
4	Dr. Akash vyas	bone spaci.	chennai

11.Create a view which contains the treatment and doctors details. Make sure that no body is allowed to modify any detail in the view.

CREATE OR REPLACE VIEW doctor_view as select d.*,t.dno,t.dname,t.mno from doctor d,treatment t where d.dno = t.dno;

```
CREATE TABLE customer(
 cno number(5)primary key,
 cname varchar(20) Not Null,
 cphone number(10),
 loc varchar(50),
 gender varchar(20) CHECK (gender in ('male', 'female'))
);
        insert into customer values (1, 'rakesh', 9909384018, 'katargam', 'male');
        insert into customer values (2, 'miten', 9879323997, 'amroli', 'male');
        insert into customer values (3, 'ganga', 908185293, 'ved', 'female');
        insert into customer values (4, 'miral', 9879952932, 'varacha', 'female');
        insert into customer values (5, 'sakshi', 9913652963, 'katargam', 'female');
CREATE TABLE item(
 ino number(5)primary key,
 iname varchar(30) Not Null,
 color varchar(20),
 weight number(5),
 expire date date Not Null,
 price number(10,2) CHECK (price > 0),
 shop name varchar(30)Not Null);
        insert into item values (101, 'fan', 'black', 5, '30-dec-2022', 1500, 'vihar shop');
        insert into item values (102, 'fruit', 'red', 2, '03-jun-2021', 150, 'collection shop');
        insert into item values (103, 'pendrive', 'silver', 1, '10-jan-2023', 5000, 'driven shop');
        insert into item values (104, 'laptop', 'white', 10, '21-nov-2025', 51000, 'amazon shop');
        insert into item values (105, 'printer', 'gray', 15, '18-march-2030', 150000, 'croma shop');
CREATE TABLE cust_item(
 cno number(5) references customer(cno) ON DELETE CASCADE,
 ino number(5) references item(ino) ON DELETE CASCADE,
 qty p number(5),
 date p date
);
        insert into cust item values (1,101,5,'15-oct-2021');
        insert into cust item values (3,105,2,'01-dec-2021');
        insert into cust item values (5,102,10,'20-nov-2021');
        insert into cust_item values (2,103,2,'10-oct-2021');
        insert into cust_item values (4,104,1,'23-july-2021');
```

1.Delete the items whose price is more than 50000.

delete from item where price > 50000;

2. Find the names of the customer who is located in same location as that of other customer.

select loc,count(loc) from customer group by loc having count(loc) > 1;

LOC	COUNT(LOC)
katargam	2

3.Display the names of items which is black, white & brown in color.

select * from item where color in ('black', 'white', 'brown');

INO	INAME	COLOR	WEIGHT	EXPIRE_DATE	PRICE	SHOP_NAME
101	fan	black	5	30-DEC-22	1500	vihar shop

4.Display the names of all the items whose names lies between 'p' and's'.

select * from item where iname BETWEEN 'p' and 's';

INO	INAME	COLOR	WEIGHT	EXPIRE_DATE	PRICE	SHOP_NAME
103	pendrive	silver	1	10-JAN-23	5000	driven shop

5. Find the item which is having less weight.

select ino,iname,price,shop_name,weight from item where weight = (select min(weight) from item);

INO	INAME	PRICE	SHOP_NAME	WEIGHT
103	pendrive	5000	driven shop	1

6.Add one month more to those items whose item no =40. Ans.

select ADD_MONTHS(expire_date,1) from item where ino = 104;

7. Count total number of items which is going to expire in next month.

select count(*) from item where to_char(expire_date,'MM') =
to_char(ADD_MONTHS(CURRENT_DATE,1),'MM');

8.List all customers whose phone number starts with '99'.

select * from customer where cphone LIKE '99%';

CNO	CNAME	CPHONE	LOC	GENDER
1	rakesh	9909384018	katargam	male
5	sakshi	9913652963	katargam	female

9. Display total value (qty*price) for all items.

select i.iname,(ci.qty_p * i.price) as value from item i,cust_item ci where i.ino = ci.ino;

	/(1-/_1-
INAME	VALUE
fan	7500
fruit	1500
pendrive	10000

10. List customer details who has purchased maximum number of items

select cno,cname from customer where cno = (select cno from cust_item where qty_p = (select max(qty_p) from cust_item));

CNO	CNAME
5	sakshi

11. Display total price item wise.

select iname, sum(price) from item group by iname;

INAME	SUM(PRICE)
fruit	150
pendrive	5000
fan	1500

12. List name of items, customer details and qty purchased.

select i.ino,i.iname,c.cno,c.cname,c.cphone,c.loc,c.gender,ci.qty_p from cust_item ci,customer c,item i where i.ino=ci.ino and c.cno=ci.cno;

INO	INAME	CNO	CNAME	CPHONE	LOC	GENDER	QTY_P
101	fan	1	rakesh	9909384018	katargam	male	5
102	fruit	5	sakshi	9913652963	katargam	female	10
103	pendrive	2	miten	9879323997	amroli	male	2

SET 8

```
Screen
```

CREATE TABLE screen (
sid varchar(10) primary key,
location varchar(20) Not Null CHECK(location in('FF','SF','TF')),
seating_capnumber(10));

- insert into screen values ('S1','FF',200);
- insert into screen values ('S2', 'SF', 150);
- insert into screen values ('S3','FF',100);
- insert into screen values ('S4', 'TF', 180);
- insert into screen values ('S5','SF',120);
- Movie

CREATE TABLE movie (mid number(5) primary key, mname varchar(50), date_of_rel date);

- insert into movie values ('101','Star wars III','12-feb-2005');
- insert into movie values ('201','Avengers','31-dec-2011');
- insert into movie values ('301','Iron man III','12-oct-2010');
- insert into movie values ('401', 'Captain America III', '10-march-2006');
- insert into movie values ('501','John Wick','24-nov-2004');
- Currnt

);

```
CREATE TABLE curent(
sid varchar(10) references screen(sid),
mid number(5) references movie(mid),
date_of_arr date,
date_of_cl date
```

- insert into curent values ('S1',101,'15-nov-2007','10-dec-2007');
- insert into curent values ('S3',501,'22-nov-2004','24-nov-2004');
- insert into curent values ('S2',201,'25-dec-2011','10-jan-2012');
- insert into curent values ('S4',301,'10-oct-2010','31-oct-2010');
- insert into curent values ('S5',401,'08-march-2006','30-march-2006');

1. Get the name of movie which has run the longest in the multiplex so far.

select m.mid,m.mname,c.date_of_cl- c.date_of_arr as Running_days from movie m,curent c where (c.date_of_cl-c.date_of_arr) in (select max(date_of_cl - date_of_arr) from curent) and m.mid = c.mid;

MID	MNAME	RUNNING_DAYS	
101	Star wars III	25	

2.Get the average duration of a movie on screen number 'S4'.

select sid,avg(date_of_cl-date_of_arr) from curent where sid = 'S4' group by sid;

SID	AVG(DATE_OF_CL-DATE_OF_ARR)
54	21

3.Get the details of movie that closed on date 24-november-2004.

select m.* from movie m, curent c where c.date of cl = '24-nov-2004';

MID	MNAME	DATE_OF_REL
101	Star wars III	12-FEB-05
201	Avengers	31-DEC-11
301	Iron man III	12-0CT-10
401	Captain America III	10-MAR-06
501	John Wick	24-NOV-04

4. Movie 'star wars III 'was released in the 7 th week of 2005. Find out the date of its release considering that a movie releases only on Friday.

select * from movie where TO_CHAR(date_of_rel,'ww')=7 and mname='Star wars III';

MID	MNAME	DATE_OF_REL	
101	Star wars III	12-FEB-05	

5.Get the full outer join of the relations screen and current.

select * from screen s full outer join curent c on s.sid=c.sid;

SID	LOCATION	SEATING_CAP	SID	MID	DATE_OF_ARR	DATE_OF_CL
51	FF	200	51	101	15-NOV-07	10-DEC-07
S 3	FF	100	S 3	501	22-NOV-04	24-NOV-04
52	SF	150	52	201	25-DEC-11	10-JAN-12
54	TF	180	54	301	10-0CT-10	31-0CT-10
55	SF	120	55	401	08-MAR-06	30-MAR-06