

HOSPITAL MANAGEMENT SYSTEM

IMPLEMENTATION

In this phase we will create tables based on the design done in the first phase using SQL queries and will write select queries to retrieve information from database based on various criteria.

➤ **Creating Tables and inserting data**

Department Table:

```
>>create table department
```

```
(
```





```
dept_id int primary key,
```

```
name char(60),
```

```
hod_id int
```

```
);
```

```
>>insert into department values(01,'cardio',03);
```

EDIT	DEPT_ID	NAME	HOD_ID
	1	cardio	3
	2	ortho	9
	3	neuro	5
	4	derma	4
	5	dental	2
row(s) 1 - 5 of 5			

Doctor Table:

```
>>create table doctor
```

```
(
```

```
doctor_id int primary key,
```

```
dept_id int,
```

```
doctor_name varchar(60),
```

```

specialization varchar(60),
generalization varchar(60),
qualification varchar(60),
address varchar(60),
contact_no int,
foreign key(dept_id) references department
);

```

```

>>insert into doctor values(01,01,'Ankit','cardiologist','Sr. Consultant','MD','New
Delhi',919876532521);

```

EDIT	DOCTOR_ID	DEPT_ID	DOCTOR_NAME	SPECIALIZATION	GENERALIZATION	QUALIFICATION	ADDRESS	CONTACT_NO
	1	1	Ankit	cardiologist	Sr. Consultant	MD	New Delhi	919876532521
	2	1	Nidhi	Dental	Sr. Consultant	MD	New Delhi	919934547599
	3	1	Manu	cardiologist	Sr. Consultant	MD	New Delhi	919654748669
	4	1	Divya	Derma	Sr. Consultant	MD	New Delhi	919995647586
	5	1	Apoorv	Neuro	Sr. Consultant	MD	New Delhi	919086965464
	6	1	Agrita	cardiologist	Consultant	MD	New Delhi	919087652435
	7	1	Navjot	Dental	Consultant	MD	New Delhi	919987543098
	8	1	Swati	Orhto	Consultant	MD	New Delhi	919899765093

Nurse table:

```

>>create table nurse
(
nurse_id int primary key,
dept_id int,
nurse_name varchar(60),
designation varchar(60),
qualification varchar(60),
contact_no int,
address varchar(60),
foreign key(dept_id) references department
);

```

```
>>insert into nurse values(01,01,'Cherring','trainee','B Pharma',9834467586,'New Delhi');
```

EDIT	NURSE_ID	DEPT_ID	NURSE_NAME	DESIGNATION	QUALIFICATION	CONTACT_NO	ADDRESS
	1	1	Cherring	trainee	B Pharma	9834467586	New Delhi
	2	2	Ruby	Sr. T	M Pharma	9835667586	New Delhi
	3	3	Laila	Sr. T	M Pharma	9843967586	New Delhi
	4	4	Raveena	trainee	B Pharma	9834753965	New Delhi
	5	5	Roly	Sr. T	M Pharma	9834871055	New Delhi
row(s) 1 - 5 of 5							

Ward Table:

```
>>create table ward
```

```
(
```

```
    ward_id int primary key,
```

```
    dept_id int,
```







```
    ward_name varchar(60),
```

```
    capacity int,
```

```
    foreign key(dept_id) references department
```

```
);
```

```
>>insert into ward values(01,01,'Economy',26);
```






EDIT	WARD_ID	DEPT_ID	WARD_NAME	CAPACITY
	1	1	Economy	26
	2	2	Economy	52
	3	3	Economy	32
	4	4	Economy	45
	5	5	Economy	78
	6	1	Economy	34
row(s) 1 - 6 of 6				

Patient table:

```
>>create table patient
```

```
(
    patient_id int primary key,
    ward_id int,
    patient_name varchar(60),
    sex char,
    age int,
    bed_no int,
    disease varchar(30),
    admit_date int,
    discharge_date int,
    address varchar(60),
    contact_no int,
    foreign key(ward_id) references ward
);
```

```
>>insert into patient values(1,01,'Kohli','M',57,1,'Disease1',12.09,12.10,'New
Delhi',9832942016);
```





EDIT	PATIENT_ID	WARD_ID	PATIENT_NAME	SEX	AGE	BED_NO	DISEASE	ADMIT_DATE	DISCHARGE_DATE	ADDRESS	CONTACT_NO
	1	1	Kohli	M	57	1	Disease1	12	12	New Delhi	9832942016
	2	2	Ganguly	M	34	1	Disease2	12	12	New Delhi	9832054818
	3	3	Tendulkar	M	67	1	Disease3	12	12	New Delhi	9834026986
	4	4	Gavaskar	M	78	1	Disease4	12	12	New Delhi	9859865046
	5	5	Sunil	M	52	1	Disease5	12	12	New Delhi	9878565686
row(s) 1 - 5 of 5											

Test table:

```
>>create table test
```

```
(  
    test_id int primary key,  
    test_name varchar(60) not null  
);
```

```
>>insert into test values(1,'test1');
```






EDIT	TEST_ID	TEST_NAME
	1	test1
	2	test2
	3	test3
	4	test4

Treats table:

```
>>create table treats
```

```
(  
    doctor_id int,  
    patient_id int,  
    checkup_date int,  
    primary key(doctor_id,patient_id),  
    foreign key(doctor_id) references doctor,  
    foreign key(patient_id) references patient  
);
```

```
>>insert into treats values(01,1,02.09);
```






EDIT	DOCTOR_ID	PATIENT_ID	CHECKUP_DATE
	1	1	2
	2	2	16
	3	3	5
	4	4	12
	5	5	22

Cares table:

```
>>create table cares
```

```
(  
    nurse_id int,  
    patient_id int,  
    primary key(nurse_id,patient_id),  
    foreign key(nurse_id) references nurse,  
    foreign key(patient_id) references patient  
);
```

```
>>insert into cares values(01,1);
```





EDIT	NURSE_ID	PATIENT_ID
	1	1
	2	2
	3	3
	4	4
	5	5

Undergoes table:

```
>>create table undergoes
```

```
(  
    test_id int,  
    patient_id int,  
    test_date int,  
    test_result varchar(30),  
    primary key(test_id,patient_id),  
    foreign key(test_id) references test,  
    foreign key(patient_id) references patient  
);
```

```
>>insert into undergoes values(1,1,10.09,Result1);
```

EDIT	TEST_ID	PATIENT_ID	TEST_DATE	TEST_RESULT
	1	1	10	Result1
	2	2	23	Result2
	3	3	24	Result3
	4	4	12	Result4

Doctor_test table:

```
>>create table doctor_test
```

```
(  
    doctor_id int,  
    test_id int,  
    primary key(test_id,doctor_id),  
    foreign key(test_id) references test,  
    foreign key(doctor_id) references doctor  
);
```

Dept_contact Table:

```
>>create table dept_contact  
(  
    dept_id int,  
    contact_no int,  
    primary ke(dept_id,contact_no),  
    foreign key(dept_id) references department  
);  
>>insert into dept_contact values(1,9839495732);
```

EDIT	DEPT_ID	CONTACT_NO
1		9839495732
2		9938647357
3		9978354676
4		9735246873

QUERIES

Query 1:

Find the details of HOD of dental department.

```
select doctor_id,doctor_name, specialization, generalization, qualification, contact_no, address
from department dp, doctor dr
where dp.dept_id=dr.dept_id
and name='cardio'
```

DOCTOR_ID	DOCTOR_NAME	SPECIALIZATION	GENERALIZATION	QUALIFICATION	CONTACT_NO	ADDRESS
1	Ankit	cardiologist	Sr. Consultant	MD	919876532521	New Delhi
2	Nidhi	Dental	Sr. Consultant	MD	919934547599	New Delhi
3	Manu	cardiologist	Sr. Consultant	MD	919654748669	New Delhi
4	Divya	Derma	Sr. Consultant	MD	919995647586	New Delhi
5	Apoorv	Neuro	Sr. Consultant	MD	919086965464	New Delhi
6	Agrita	cardiologist	Consultant	MD	919087652435	New Delhi
7	Navjot	Dental	Consultant	MD	919987543098	New Delhi
8	Swati	Orhto	Consultant	MD	919899765093	New Delhi

Query 2:

Find the ward with maximum capacity.

```
select ward_id, ward_name, capacity
from ward
where capacity>=all(select capacity from ward)
```

WARD_ID	WARD_NAME	CAPACITY
5	Economy	78

Query 3:

Find the details of the patients whose name starts from G.

```
select *  
from patient  
where patient_name like 'G%'
```

PATIENT_ID	WARD_ID	PATIENT_NAME	SEX	AGE	BED_NO	DISEASE	ADMIT_DATE	DISCHARGE_DATE	ADDRESS	CONTACT_NO
2	2	Ganguly	M	34	1	Disease2	12	12	New Delhi	9832054818
4	4	Gavaskar	M	78	1	Disease4	12	12	New Delhi	9859865046

Query 4:

List all contact numbers of cardio department.

```
select contact_no  
from department d, dept_contact dc  
where d.dept_id=dc.dept_id  
and d.name='cardio'
```

CONTACT_NO
9978354676

Query 5:

List all the information about doctors of 'cardio' department.

```
select doctor_id, doctor_name, specialization, generalization, qualification, contact_no, address  
from department dp, doctor dr  
where dp.dept_id=dr.dept_id
```

DOCTOR_ID	DOCTOR_NAME	SPECIALIZATION	GENERALIZATION	QUALIFICATION	CONTACT_NO	ADDRESS
1	Ankit	cardiologist	Sr. Consultant	MD	919876532521	New Delhi
2	Nidhi	Dental	Sr. Consultant	MD	919934547599	New Delhi
3	Manu	cardiologist	Sr. Consultant	MD	919654748669	New Delhi
4	Divya	Derma	Sr. Consultant	MD	919995647586	New Delhi
5	Apoorv	Neuro	Sr. Consultant	MD	919086965464	New Delhi
6	Agrita	cardiologist	Consultant	MD	919087652435	New Delhi
7	Navjot	Dental	Consultant	MD	919987543098	New Delhi
8	Swati	Orhto	Consultant	MD	919899765093	New Delhi

Query 6:

List all the patient who are treated by the doctor with doctor_name='Nidhi'

```

select p.patient_id, p.patient_name, p.age, p.admit_date, p.discharge_date
from doctor d, treats t, patient p
where d.doctor_id=t.doctor_id
and t.patient_id=p.patient_id
and d.doctor_id=2

```

PATIENT_ID	PATIENT_NAME	AGE	ADMIT_DATE	DISCHARGE_DATE
2	Ganguly	34	12	12

Query 7:

List all the details of nurse working in 'Derma' department.

```

select * from nurse n, department dp
where n.dept_id=dp.dept_id
and name='derma'

```

NURSE_ID	DEPT_ID	NURSE_NAME	DESIGNATION	QUALIFICATION	CONTACT_NO	ADDRESS	DEPT_ID	NAME	HOD_ID
4	4	Raveena	trainee	B Pharma	9834753965	New Delhi	4	derma	4