



American International University- Bangladesh

ADVANCE DATABASE MANAGEMENT SYSTEM SECTION: B GROUP NAME: ROYAL BLUE

Mid-Term Project Fall 20-21

Project Topic: **Hospital Management System**

With respectfully submitted to Rezwan Ahmed

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3. System Summary:

The hospital management system served simplify the work of healthcare professionals as well as their interactions with patients. Its vast application and in real time, it involves many users and maintaining database including information of all the patients, all the hospital employee's including the doctors, the receptionist and the nurses. The hospital Management System can be registration a username and password. It is accessible only admin. Admin can add, delete and update data into the database. The data can be retrieved easily. The interface is very user friendly. The data are well protected for personal use and makes the data processing very fast.

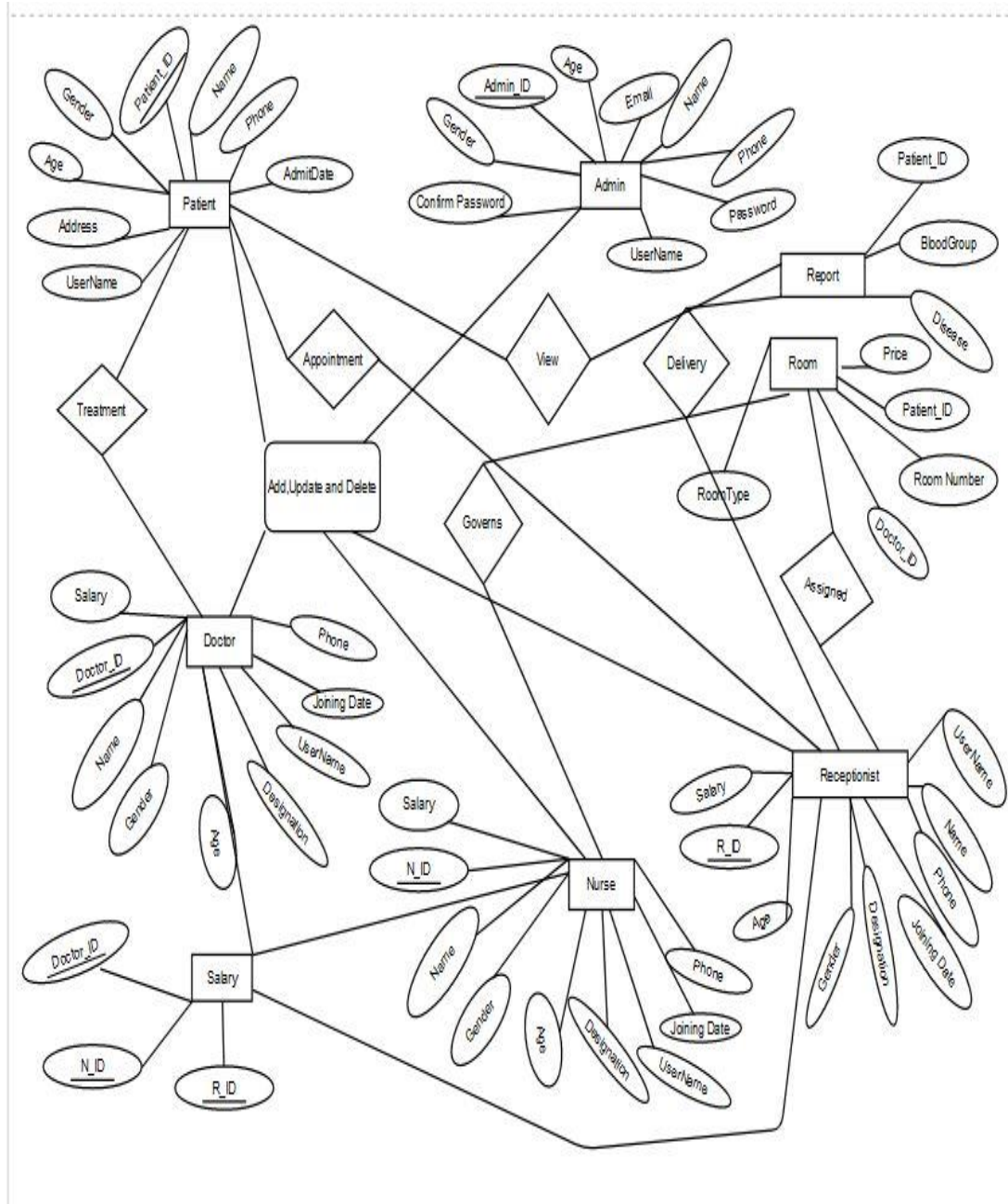
The software has the facility to each patient and employee who registration the form will be assigned a particular unique id available on the system and the receptionist can access the database to help the visitors by retrieving all the information about the patients and help them out in the best way. They can access the doctor information like the name of the doctor and their availability etc.

It includes a search facility to know the current status of each room. The receptionist will be responsible for managing the appointments with the doctor. Also, the receptionist needs to keep track about the information of all the patients report. User can search availability of a doctor and the details of a patient using the id.

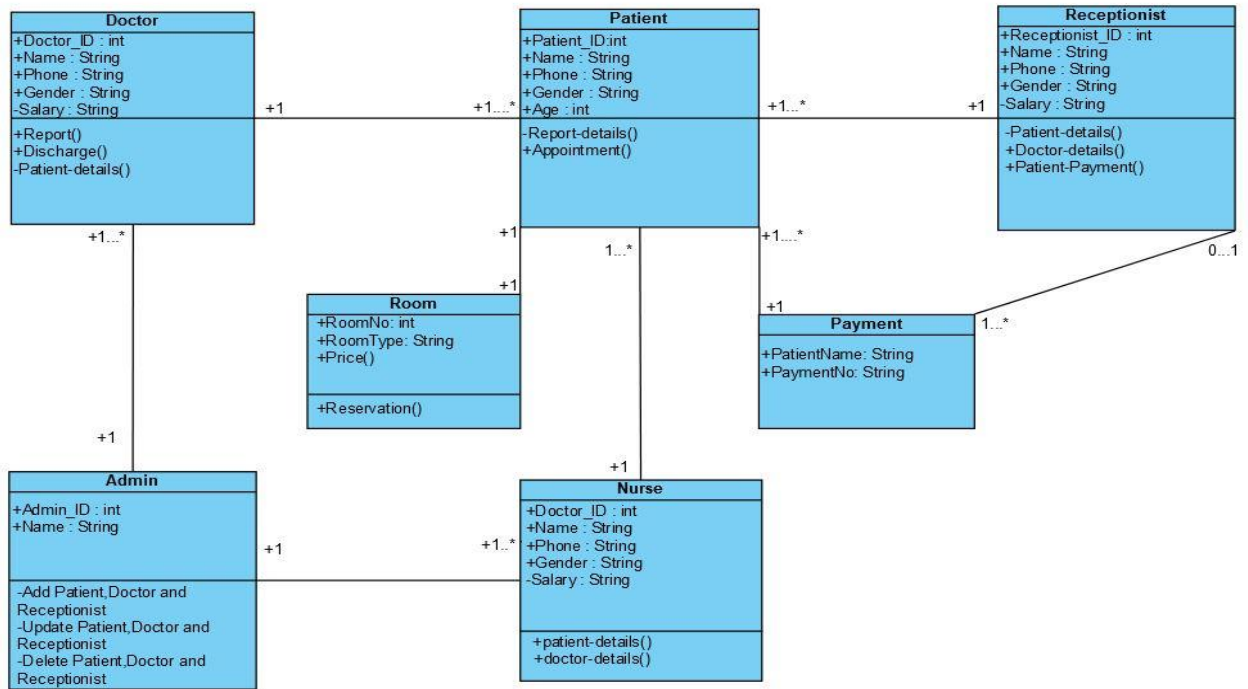
There are uses in the system. The user groups involved with respect to hospital database are:

- Admin
- Doctor
- Nurse
- Receptionist
- Patient

4. ER Diagram:

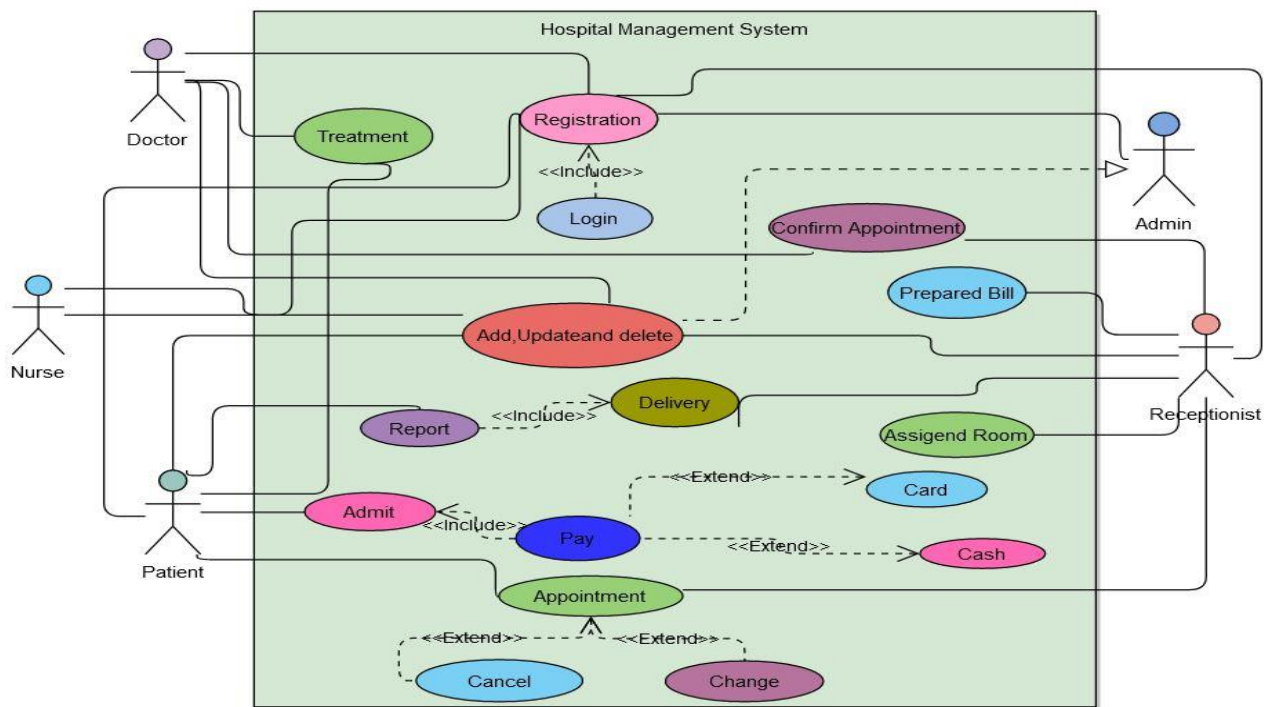


5. Class Diagram:



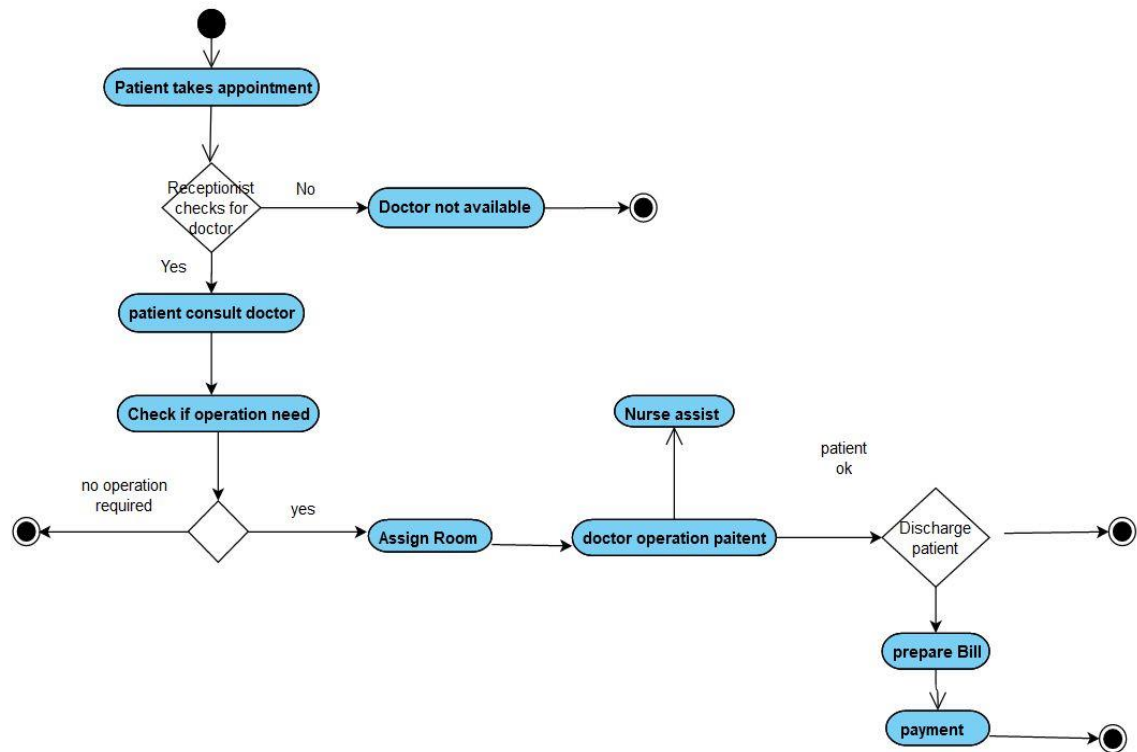
6

I. Use case Diagram:

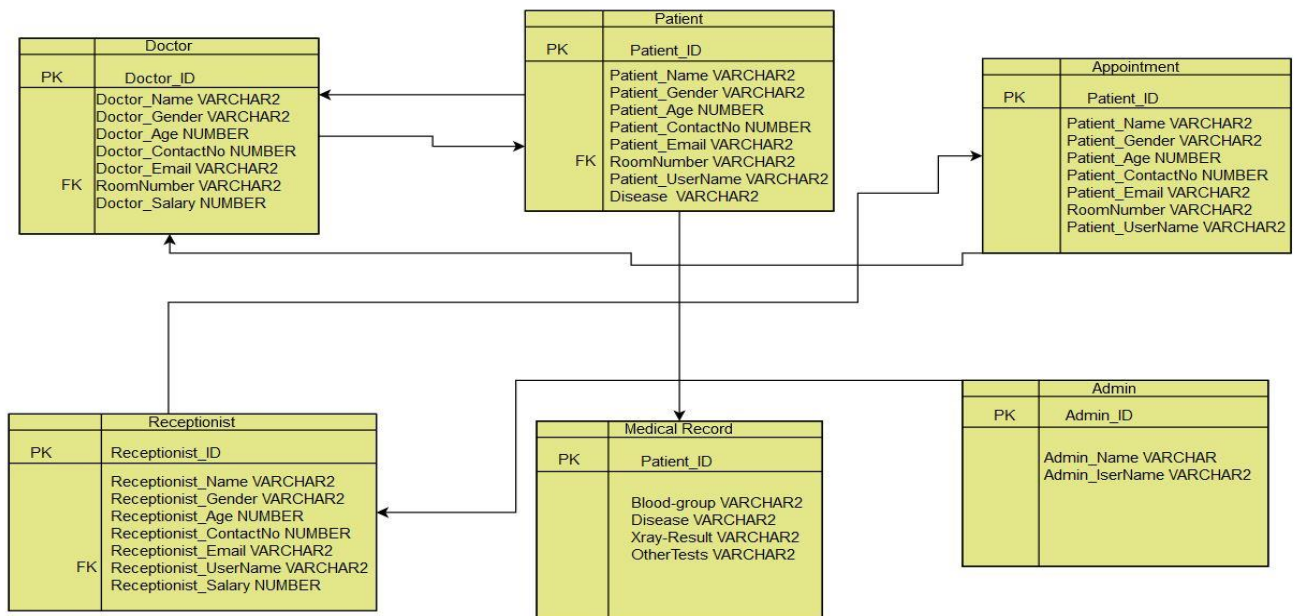


6.

II. Activity Diagram



7.Schema Diagram:



8. Table Creation & Value Insertion:

CREATE TABLE ADMIN

```
(Admin_ID NUMBER (10) PRIMARY KEY,  
Admin_Name VARCHAR2 (50) NOT NULL,  
Admin_Gender VARCHAR2 (10) NOT NULL,  
Admin_Age NUMBER (10) NOT NULL,  
Admin_ContactNo NUMBER (20) NOT NULL,  
Admin_UserName VARCHAR2 (50) NOT NULL);
```

ADMIN Value Insertion :

```
insert into ADMIN values(101,'Sakibul Khan','Male',28,'01745665555','xyz3');  
insert into ADMIN values(102,'Hasan Habib','Male',31,'01345665789','hasm');  
insert into ADMIN values(201,'Hayat Islam','Female',28,'01845665111','m4kl');  
insert into ADMIN values(211,'Ayain Rahman','Male',30,'01915664548','qop1');  
insert into ADMIN values(235,'Sakib Iskam','Male',25,'01715664545','wzq7');  
insert into ADMIN values(303,'Puja Hawladar','Female',30,'01745667878','7hyx');
```

CREATE TABLE DOCTOR

```
(Doctor_ID NUMBER (10) PRIMARY KEY  
Doctor_Name VARCHAR2(50) NOT NULL,  
Doctor_Gender VARCHAR2 (10) NOT NULL,  
Doctor_Age NUMBER (10) NOT NULL,  
Doctor_ContactNo NUMBER(11) NOT NULL,  
Doctor_JoiningDate DATE NOT NULL,  
Department_Name VARCHAR(100) NOT NULL,  
Doctor_Designation VARCHAR2(100) NOT NULL,  
Doctor_Salary NUMBER (10) NOT NULL);
```

DOCTOR Value Insertion :

INSERT INTO DOCTOR

VALUES (1,'Dr.Saifulla Khan','Male',50,01821212,to_date('05-FEB-95','DD-MM-YY'),'Cardiology', 'Assistant',50000);

INSERT INTO DOCTOR

VALUES (2,'Dr.Rashed Islam','Male',26,01721212,to_date('05-MAR-92','DD-MM-YY'),'Diagnostic','professor',60000);

INSERT INTO DOCTOR

VALUES (3,'Dr.Ripa','Female',27,01321212,to_date('05-Nov-95','DD-MM-YY'),'Orthopedics','Assistant professor',45000);

INSERT INTO DOCTOR

VALUES (4,'Dr.Seemaa','Female',27,011721212, to_date('13-jan-99','DD-MM-YY'),'Neurology','professor',65000);

INSERT INTO DOCTOR

VALUES (5,'Dr. Uzzal Kumar','Male',29,0136255212, to_date('13-Nov-99','DD-MM-YY'),'Neurology', 'assistant professor',55000);

CREATE TABLE PATIENT

(Patient_ID NUMBER (10) PRIMARY KEY,
Patient_Name VARCHAR2 (50) NOT NULL,
Patient_Gender VARCHAR2 (10) NOT NULL,
Patient_Age NUMBER (10) NOT NULL,
Patient_ContactNo NUMBER (20) NOT NULL,
Patient_UserName VARCHAR2 (50) NOT NULL,
Patient_Address VARCHAR2(100) NOT NULL,
AdmitDate VARCHAR2 (20) NOT NULL,
Department_Name VARCHAR2 (20) NOT NULL);

PATIENT Value Insertion:

INSERT INTO PATIENT VALUES(1,'Samia','Female',22,01521322246,'Samia12','Badda','21-july-2020','Cardiology')

INSERT INTO PATIENT VALUES(2,'Shoily','Female',21,0152223246,'Soily12','Mirpur-1','22-june-2020','Diagnostic')

INSERT INTO PATIENT VALUES (3,'Srity','Female',22,0152223246,'Srity44','Nilkhet ','21-Nov-2020','Orthopedics')

INSERT INTO PATIENT VALUES(4,'dohan','male',25,0162223246,'dohan44','Noakhali','22-june-2020','Neurology')

INSERT INTO PATIENT VALUES(5,'sifat','male',28,01655223246,'sify4','khilket','23-april-2020','Orthopedic')

INSERT INTO PATIENT VALUES (6,'saiful','male',25,01655223246,'sif000','Old Dhaka','22-april-2020','Cardiology')

CREATE TABLE NURSE

(Nurse_ID NUMBER (10) PRIMARY KEY
Nurse_Name VARCHAR2(50) NOT NULL,
Nurse_Gender VARCHAR2 (10) NOT NULL,
Nurse_Age NUMBER (10) NOT NULL,
Nurse_ContactNo NUMBER (11) NOT NULL,
Nurse_JoiningDate DATE NOT NULL,
Department_Name VARCHAR (100) NOT NULL,
Nurse_Designation VARCHAR2(100) NOT NULL,
Nurse_Salary NUMBER (10) NOT NULL);

NURSE Value Insertion:

insert into NURSE values (1,'Anika','Female',22,'01612842314', to_date('05-FEB-1995','DD-MM-YY'),'Cardiology', 'Junior Nurse');

insert into NURSE values (2,'Keya','Female',21,'01712842777', to_date('08-NOV-2003','DD-MM-YY'),'Diagnostic', 'Senior Nurse');

insert into NURSE values (3,'Nur','Male',28,'01612843535', to_date('11-MAR-2008','DD-MM-YY'),'Orthopedics', 'Junior Nurse');

insert into NURSE values (4,'Liya','Female',22,'01912942121', to_date('01-FEB-1999','DD-MM-YY'),'Cardiology', 'Senior Nurse');

insert into NURSE values (5,'Joy','Male',23,'01812842314', to_date('05-JAN-1999','DD-MM-YY'),'Diagnostic', 'Junior Nurse');

insert into NURSE values (6,'Nil','Male',22,'01922842888', to_date('05-FEB-2002','DD-MM-YY'),'Neurology', 'Nurse');

insert into NURSE values (7,'Anu','Female',22,'01612842555', to_date('05-DEC-1999','DD-MM-YY'),'Cardiology', 'Nurse');

CREATE TABLE RECEPTIONIST

(Receptionist_ID NUMBER (10) PRIMARY KEY,

Receptionist_Name VARCHAR2 (50) NOT NULL,
Receptionist_Gender VARCHAR2 (10) NOT NULL,
Receptionist_Age NUMBER (10) NOT NULL,
Receptionist_UserName VARCHAR2 (50) NOT NULL,
Receptionist_JoiningDate DATE NOT NULL,
Receptionist_Designation VARCHAR2(50) NOT NULL,
Receptionist_Salary NUMBER (20) NOT NULL);

RECEPTIONIST Value Insertion:

```
INSERT INTO RECEPTIONIST
VALUES (1,'jasmin','female',50,'jasmin12', to_date('08-NOV-2003','DD-MM-YY'),'Senior ',18000);
INSERT INTO RECEPTIONIST
VALUES (2,'ira','female',23,'ira123', to_date('07-NOV-2004','DD-MM-YY'),'Junior',12000);
INSERT INTO RECEPTIONIST
VALUES (3,'ikraam','male',25,'ikram123', to_date('04-AUG-2004','DD-MM-YY'),'junior',12000);
INSERT INTO RECEPTIONIST
VALUES (4,'dohan','male',30,'dohan234', to_date('04-AUG-2005','DD-MM-YY'),'Senior',19000);
INSERT INTO RECEPTIONIST
VALUES (5,'sajib','male',22,'sajib234', to_date('05-DEC-2007','DD-MM-YY'),'Junior',11000);
```

CREATE TABLE REPORT

(Report_NO NUMBER (10),
Patient_ID NUMBER (10) NOT NULL,
Doctor_ID NUMBER (10) NOT NULL,
Patient_BloodGroup VARCHAR2 (20) NOT NULL,
Patient_Disease VARCHAR2 (30) NOT NULL,
PRIMARY KEY (Patient_ID ,Doctor_ID,Report_NO));

REPORT Value Insertion:

Insert into REPORT values (101,1,1,'A+', 'Heart Probleam');

Insert into REPORT values (102,2,2,'B+', 'Diabetics');
Insert into REPORT values (103,3,3,'A-', 'knee surgery');
Insert into REPORT values (104,4,4,'o+', 'Neuro diseas');
Insert into REPORT values (105,5,5,'A+', 'Brain Tumour');
Insert into REPORT values (106,6,1,'AB+', 'Heart Probleam');

CREATE TABLE ROOM

(Room_NO NUMBER (10) ,
Patient_ID NUMBER (10),
Nurse_ID NUMBER (10) ,
Doctor_ID NUMBER (10) ,
PRIMARY KEY(Patient_ID,Nurse_ID,Doctor_ID));

ROOM Value Insertion:

Insert into ROOM values (300,1,2,3);
Insert into ROOM values (300,2,1,3);
Insert into ROOM values (301,3,4,1);
Insert into ROOM values (302,4,5,1);
Insert into ROOM values (302,5,6,5);
Insert into ROOM values (303,6,7,2);

CREATE TABLE DEPARTMENT

(Department_ID NUMBER (10) PRIMARY KEY,
Department_Name VARCHAR2 (14) FOREIGN KEY);

DEPERTMENT Value Insertion:

Insert into DEPARTMENT values (7823, 'Cardiology');
Insert into DEPARTMENT values (9123, 'Diagnostic');
Insert into DEPARTMENT values (4125, 'Orthopedics');
Insert into DEPARTMENT values (9783, 'Neurology');

9. Screen shots of sample data:

```
CREATE TABLE ADMIN  
(Admin ID NUMBER (10) PRIMARY KEY,  
Admin Name VARCHAR2 (50) NOT NULL,  
Admin Gender VARCHAR2 (10) NOT NULL,  
Admin Age NUMBER (10) NOT NULL,  
Admin ContactNo NUMBER (20) NOT NULL,  
Admin UserName VARCHAR2 (50) NOT NULL);
```

Results Explain Describe Saved SQL History

Table created.

0.02 seconds

```

insert into ADMIN values(101,'Sakibul Khan','Male',28,'01745665555','xyz3');
insert into ADMIN values(102,'Hasan Habib','Male',31,'01345665789','hasm');
insert into ADMIN values(201,'Hayat Islam','Female',28,'01845665111','m4kl');
insert into ADMIN values(211,'Ayain Rahman','Male',30,'01915664548','qop1');
insert into ADMIN values(235,'Sakib Iskam','Male',25,'01715664545','wzq7');
insert into ADMIN values(303,'Puja Hawladar','Female',30,'01745667878','7hyx');

```

```
select * from admin
```

Results Explain Describe Saved SQL History

ADMIN_ID	ADMIN_NAME	ADMIN_GENDER	ADMIN_AGE	ADMIN_CONTACTNO	ADMIN_USERNAME
101	Sakibul Khan	Male	28	1745665555	xyz3
102	Hasan Habib	Male	31	1345665789	hasm
201	Hayat Islam	Female	28	1845665111	m4kl
211	Ayain Rahman	Male	30	1915664548	qop1
235	Sakib Iskam	Male	25	1715664545	wzq7
303	Puja Hawladar	Female	30	1745667878	7hyx

6 rows returned in 0.00 seconds [Download](#)

```

CREATE TABLE NURSE
(Nurse_ID NUMBER (10) PRIMARY KEY,
Nurse Name VARCHAR2(50) NOT NULL,
Nurse Gender VARCHAR2 (10) NOT NULL,
Nurse Age NUMBER (10) NOT NULL,
Nurse ContactNo NUMBER(11) NOT NULL,
Nurse JoiningDate DATE NOT NULL,
Department Name VARCHAR(100) NOT NULL,
Nurse Designation VARCHAR2(100) NOT NULL,
Nurse Salary NUMBER (10) NOT NULL);

```

Results Explain Describe Saved SQL History

Table created.

```

insert into NURSE values(1,'Anika','Female',22,01612842314,to_date('05-FEB-1995','DD-MM-YY'),'Cardiology','Junior Nurse',13000);
insert into NURSE values(2,'Keya','Female',21,01712842777,to_date('08-NOV-2003','DD-MM-YY'),'Diagnostic','Senior Nurse',18000);
insert into NURSE values(3,'Nur','Male',28,01612843535,to_date('11-MAR-2008','DD-MM-YY'),'Orthopedics','Junior Nurse',16000);
insert into NURSE values(4,'Liya','Female',22,01912942121,to_date('01-FEB-1999','DD-MM-YY'),'Cardiology','Senior Nurse',12000);
insert into NURSE values(5,'Joy','Male',23,01812842314,to_date('05-JAN-1999','DD-MM-YY'),'Diagnostic','Junior Nurse',13000);
insert into NURSE values(6,'Nil','Male',22,01922842888,to_date('05-FEB-2002','DD-MM-YY'),'Neurology','Nurse',10000);
insert into NURSE values(7,'Anu','Female',22,01612842555,to_date('05-DEC-1999','DD-MM-YY'),'Cardiology','Nurse',10000);

```

```
select * from nurse
```

Results Explain Describe Saved SQL History

NURSE_ID	NURSE_NAME	NURSE_GENDER	NURSE_AGE	NURSE_CONTACTNO	NURSE_JOININGDATE	DEPARTMENT_NAME	NURSE_DESIGNATION	NURSE_SALARY
1	Anika	Female	22	1612842314	02/05/1995	Cardiology	Junior Nurse	13000
2	Keya	Female	21	1712842777	11/08/2003	Diagnostic	Senior Nurse	18000
3	Nur	Male	28	1612843535	03/11/2008	Orthopedics	Junior Nurse	16000
4	Liya	Female	22	1912942121	02/01/1999	Cardiology	Senior Nurse	12000
5	Joy	Male	23	1812842314	01/05/1999	Diagnostic	Junior Nurse	13000
6	Nil	Male	22	1922842888	02/05/2002	Neurology	Nurse	10000
7	Anu	Female	22	1612842555	12/05/1999	Cardiology	Nurse	10000

7 rows returned in 0.00 seconds [Download](#)

```

CREATE TABLE DOCTOR
(DOCTOR_ID NUMBER (10) PRIMARY KEY,
DOCTOR_NAME VARCHAR2(50) NOT NULL,
DOCTOR_GENDER VARCHAR2 (10) NOT NULL,
DOCTOR_AGE NUMBER (10) NOT NULL,
DOCTOR_CONTACTNO NUMBER(11) NOT NULL,
DOCTOR_JOININGDATE DATE NOT NULL,
DEPARTMENT_NAME VARCHAR(100) NOT NULL,
DOCTOR_DESIGNATION VARCHAR2(100) NOT NULL,
DOCTOR_SALARY NUMBER (10) NOT NULL);

```

Results Explain Describe Saved SQL History

Table created.

```

INSERT INTO DOCTOR
VALUES (1,'Dr.Saifulla Khan','Male',50,01821212,to_date('05-FEB-95','DD-MM-YY'),'Cardiology','Assistant ',50000);
INSERT INTO DOCTOR
VALUES (2,'Dr.Rashed Islam','Male',26,01721212,to_date('05-MAR-92','DD-MM-YY'),'Diagnostic','profession',60000);
INSERT INTO DOCTOR
VALUES (3,'Dr.Ripa','Female',27,01321212,to_date('05-Nov-95','DD-MM-YY'),'Orthopedics','Assistant professor',45000);
INSERT INTO DOCTOR
VALUES (4,'Dr.Seemaa','Female',27,011721212,to_date('13-Jan-99','DD-MM-YY'),'Neurology','professor',65000);
INSERT INTO DOCTOR
VALUES (5,'Dr.Uzzal Kumar','Male',29,0136255212,to_date('13-Nov-99','DD-MM-YY'),'Neurology','assistant professor',55000);
Select * from DOCTOR

```

Results Explain Describe Saved SQL History

DOCTOR_ID	DOCTOR_NAME	DOCTOR_GENDER	DOCTOR_AGE	DOCTOR_CONTACTNO	DOCTOR_JOININGDATE	DEPARTMENT_NAME	DOCTOR_DESIGNATION	DOCTOR_SALARY
1	Dr.Saifulla Khan	Male	50	1821212	02/05/2095	Cardiology	Assistant	50000
2	Dr.Rashed Islam	Male	26	1721212	03/05/2092	Diagnostic	professor	60000
3	Dr.Ripa	Female	27	1321212	11/05/2095	Orthopedics	Assistant professor	45000
4	Dr.Seemaa	Female	27	11721212	01/13/2099	Neurology	professor	65000
5	Dr.Uzzal Kumar	Male	29	136255212	11/13/2099	Neurology	assistant professor	55000

5 rows returned in 0.01 seconds [Download](#)

```

CREATE TABLE RECEPTIONIST
(Receptionist ID NUMBER (10) PRIMARY KEY,
Receptionist Name VARCHAR2 (50) NOT NULL,
Receptionist Gender VARCHAR2 (10) NOT NULL,
Receptionist Age NUMBER (10) NOT NULL,
Receptionist UserName VARCHAR2 (50) NOT NULL,
Receptionist JoiningDate DATE NOT NULL,
Receptionist Designation VARCHAR2(50) NOT NULL,
Receptionist Salary NUMBER(20) NOT NULL);

```

Results Explain Describe Saved SQL History

Table created.

0.01 seconds

```

INSERT INTO RECEPTIONIST
VALUES (1,'jasmin','female',50,'jasmin12',to_date('08-NOV-2003','DD-MM-YY'),'Senior ',18000);
INSERT INTO RECEPTIONIST
VALUES (2,'ira','female',23,'ira123',to_date('07-NOV-2004','DD-MM-YY'),'Junior',12000);
INSERT INTO RECEPTIONIST
VALUES (3,'ikraam','male',25,'ikram123',to_date('04-AUG-2004','DD-MM-YY'),'junior',12000);
INSERT INTO RECEPTIONIST
VALUES (4,'dohan','male',30,'dohan234',to_date('04-AUG-2005','DD-MM-YY'),'Senior',19000);
INSERT INTO RECEPTIONIST
VALUES (5,'sajib','male',22,'sajib234',to_date('05-DEC-2007','DD-MM-YY'),'Junior',11000);

```

Select * from RECEPTIONIST

Results Explain Describe Saved SQL History

RECEPTIONIST_ID	RECEPTIONIST_NAME	RECEPTIONIST_GENDER	RECEPTIONIST_AGE	RECEPTIONIST_USERNAME	RECEPTIONIST_JOININGDATE	RECEPTIONIST_DESIGNATION	RECEPTIONIST_SALARY
1	jasmin	female	50	jasmin12	11/08/2003	Senior	18000
2	ira	female	23	ira123	11/07/2004	Junior	12000
3	ikraam	male	25	ikram123	08/04/2004	junior	12000
4	dohan	male	30	dohan234	08/04/2005	Senior	19000
5	sajib	male	22	sajib234	12/05/2007	Junior	11000

5 rows returned in 0.00 seconds [Download](#)

```

CREATE TABLE PATIENT
(Patient ID NUMBER (10) PRIMARY KEY,
Patient Name VARCHAR2 (50) NOT NULL,
Patient Gender VARCHAR2 (10) NOT NULL,
Patient Age NUMBER (10) NOT NULL,
Patient ContactNo NUMBER (20) NOT NULL,
Patient UserName VARCHAR2 (50) NOT NULL,
Patient Address VARCHAR2(100) NOT NULL,
AdmitDate VARCHAR2 (20) NOT NULL,
Department Name VARCHAR2 (20) NOT NULL);

```

Results Explain Describe Saved SQL History

Table dropped.


```

INSERT INTO PATIENT VALUES(1,'Samia','Female',22,01521322246,'Samia12','Badda','21-july-2020','Cardiology')
INSERT INTO PATIENT VALUES(2,'Shoily','Female',21,0152223246,'Soily12','Mirpur-1','22-june-2020','Diagnostic')
INSERT INTO PATIENT VALUES(3,'Srity','Female',22,0152223246,'Srity44','Nilkhet','21-Nov-2020','Orthopedics')
INSERT INTO PATIENT VALUES(4,'dohan','male',25,0162223246,'dohan44','Noakhali','22-june-2020','Neurology')
INSERT INTO PATIENT VALUES(5,'sifat','male',28,01655223246,'sify4','khilkhet','23-april-2020','Orthopedic')
INSERT INTO PATIENT VALUES(6,'saiful','male',25,01655223246,'sif000','Old Dhaka','22-april-2020','Cardiology')

```

```
select * from PATIENT
```

Results Explain Describe Saved SQL History

PATIENT_ID	PATIENT_NAME	PATIENT_GENDER	PATIENT_AGE	PATIENT_CONTACTNO	PATIENT_USERNAME	PATIENT_ADDRESS	ADMITDATE	DEPARTMENT_NAME
1	Samia	Female	22	1521322246	Samia12	Badda	21-july-2020	Cardiology
2	Shoily	Female	21	152223246	Soily12	Mirpur-1	22-june-2020	Diagnostic
3	Srity	Female	22	152223246	Srity44	Nilkhet	21-Nov-2020	Orthopedics
4	dohan	male	25	162223246	dohan44	Noakhali	22-june-2020	Neurology
5	sifat	male	28	1655223246	sify4	khilkhet	23-april-2020	Orthopedic
6	saiful	male	25	1655223246	sif000	Old Dhaka	22-april-2020	Cardiology

6 rows returned in 0.01 seconds

[Download](#)

```

CREATE TABLE REPORT
(Report NO NUMBER (10) ,
Patient ID NUMBER (10) NOT NULL ,
Doctor ID NUMBER (10) NOT NULL,
Patient BloodGroup VARCHAR2 (20) NOT NULL,
Patient Disease VARCHAR2 (30) NOT NULL,
PRIMARY KEY(Patient ID ,Doctor ID,Report NO));

```

Results Explain Describe Saved SQL History

Table created.

```

Insert into REPORT values (101,1,1,'A+', 'Heart Probleam');
Insert into REPORT values (102,2,2,'B+', 'Diabetics');
Insert into REPORT values (103,3,3,'A-', 'knee surgery');
Insert into REPORT values (104,4,4,'o+', 'Neuro diseas');
Insert into REPORT values (105,5,5,'A+', 'Brain Tumour');
Insert into REPORT values (106,6,1,'AB+', 'Heart Probleam');

```

```
select * from report
```

Results Explain Describe Saved SQL History

REPORT_NO	PATIENT_ID	DOCTOR_ID	PATIENT_BLOODGROUP	PATIENT_DISEASE
101	1	1	A+	Heart Probleam
102	2	2	B+	Diabetics
103	3	3	A-	knee surgery
104	4	4	o+	Neuro diseas
105	5	5	A+	Brain Tumour
106	6	1	AB+	Heart Probleam

6 rows returned in 0.00 seconds

[Download](#)

```
CREATE TABLE ROOM
(Room NO NUMBER (10) ,
Patient_ID NUMBER (10),
Nurse_ID NUMBER (10) ,
Doctor_ID NUMBER (10) ,
PRIMARY KEY(Patient_ID,Nurse_ID,Doctor_ID ));
```

Results Explain Describe Saved SQL History

Table created.

```
Insert into ROOM values (300,1,2,3);
Insert into ROOM values (300,2,1,3);
Insert into ROOM values (301,3,4,1);
Insert into ROOM values (302,4,5,1);
Insert into ROOM values (302,5,6,5);
Insert into ROOM values (303,6,7,2);
```

```
select * from ROOM
```

Results Explain Describe Saved SQL History

ROOM_NO	PATIENT_ID	NURSE_ID	DOCTOR_ID
300	1	2	3
300	2	1	3
301	3	4	1
302	4	5	1
302	5	6	5
303	6	7	2

10. Ten Questions & Answers:

1. Display the Patient id, name, age if the age is above 22.

Answer: SELECT PATIENT_ID, PATIENT_NAME, PATIENT_GENDER FROM PATIENT WHERE PATIENT_AGE > 22;

2. Display Admin age, gender of Hasan Habib.

Answer: SELECT ADMIN_AGE, ADMIN_GENDER from ADMIN where ADMIN_NAME= 'Hasan Habib';

3. Concatenate doctor name and age and display room from doctor table.

Answer: SELECT CONCAT (DOCTOR_NAME, DOCTOR_AGE) from DOCTOR;

4. Display Patient ID, name and Doctor ID, name from patient, doctor table where room no is same.

Answer: select PATIENT.PATIENT_ID, PATIENT.PATIENT_NAME, DOCTOR.DOCTOR_ID, DOCTOR.DOCTOR_NAME, ROOM_NO from PATIENT, DOCTOR, ROOM Where ROOM.PATIENT_ID = ROOM.DOCTOR_ID;

5. Display patient Id and their doctor name, doctor salary and doctor Id.

Answer: Select DOCTOR_NAME, DOCTOR_SALARY, PATIENT_ID, DOCTOR_ID from DOCTOR, PATIENT Where PATIENT.DEPARTMENT_NAME= DOCTOR. DEPARTMENT_NAME;

6. List of the obedient Doctor who are the PROFESSOR of the Cardiology Department.

Answer: SELECT DOCTOR_NAME from DOCTOR Where DEPARTMENT_NAME='Cardiology' and DOCTOR_DESIGNATION='PROFESSOR';

7. Update nurse salary from nurse table which nurse age is 28, they will get extra 1000 with their salary.

Answer: UPDATE NURSE SET NURSE_SALARY = NURSE_SALARY + 1000 WHERE NURSE_AGE IN (SELECT NURSE_AGE FROM NURSE WHERE NURSE_AGE=28);

8. To display NAME, GENDER of the RECEPTIONISTS from RECEPTIONIST table whose Designation As 'Senior'.

Answer: Select RECEPTIONIST_ID, RECEPTIONIST_NAME, RECEPTIONIST_GENDER from RECEPTIONIST WHERE RECEPTIONIST_ID IN (SELECT RECEPTIONIST_ID from RECEPTIONIST where RECEPTIONIST_DESIGNATION ='Senior');

9. Display the list of Doctor which salary is greater than 50000 (In subquery).

Answer: Select * FROM DOCTOR WHERE DOCTOR_ID IN (SELECT DOCTOR_ID FROM DOCTOR WHERE DOCTOR_SALARY > 50000);

10. Display the list of nurse ID for each department by left joining.

Answer: Select D. DEPARTMENT_NAME, COUNT (N. NURSE_ID) AS numberOfNurse FROM N. NURSE LEFT JOIN DEPARTMENT ON N. DEPARTMENT_NAME = D. DEPARTMENT_NAME GROUP BY DEPARTMENT_NAME;

11. A simple User Interface for user authentication for successful login operation to the system by connecting oracle database using JAVA.

