



DATABASE MANAGEMENT SYSTEM

SQL HOSPITAL GAME

GAME SCENARIO

Our game is about a boy named Raghav, who with his mother has just moved to the town.

Raghav's mother is not well from a few days she is experiencing chest pains and shortness of breath.

Our story revolves around the procedure that will take place in the hospital when Raghav takes his mother there.

In this game, we have a database which consist of different tables which will help the player in making decisions to help Raghav's mother get the treatment.

Our database consists of tables like :-

- Doctors
- Medicines
- Patients
- Reports
- Packages
- Illness

In this game the player will have to make various decisions, for eg: what type of package to choose, on what day to book an appointment etc.

The player will have to use different type of operators to reach the end of the game.

This is a fun game which will help the players to enhance their knowledge in SQL.

E-R DIAGRAM

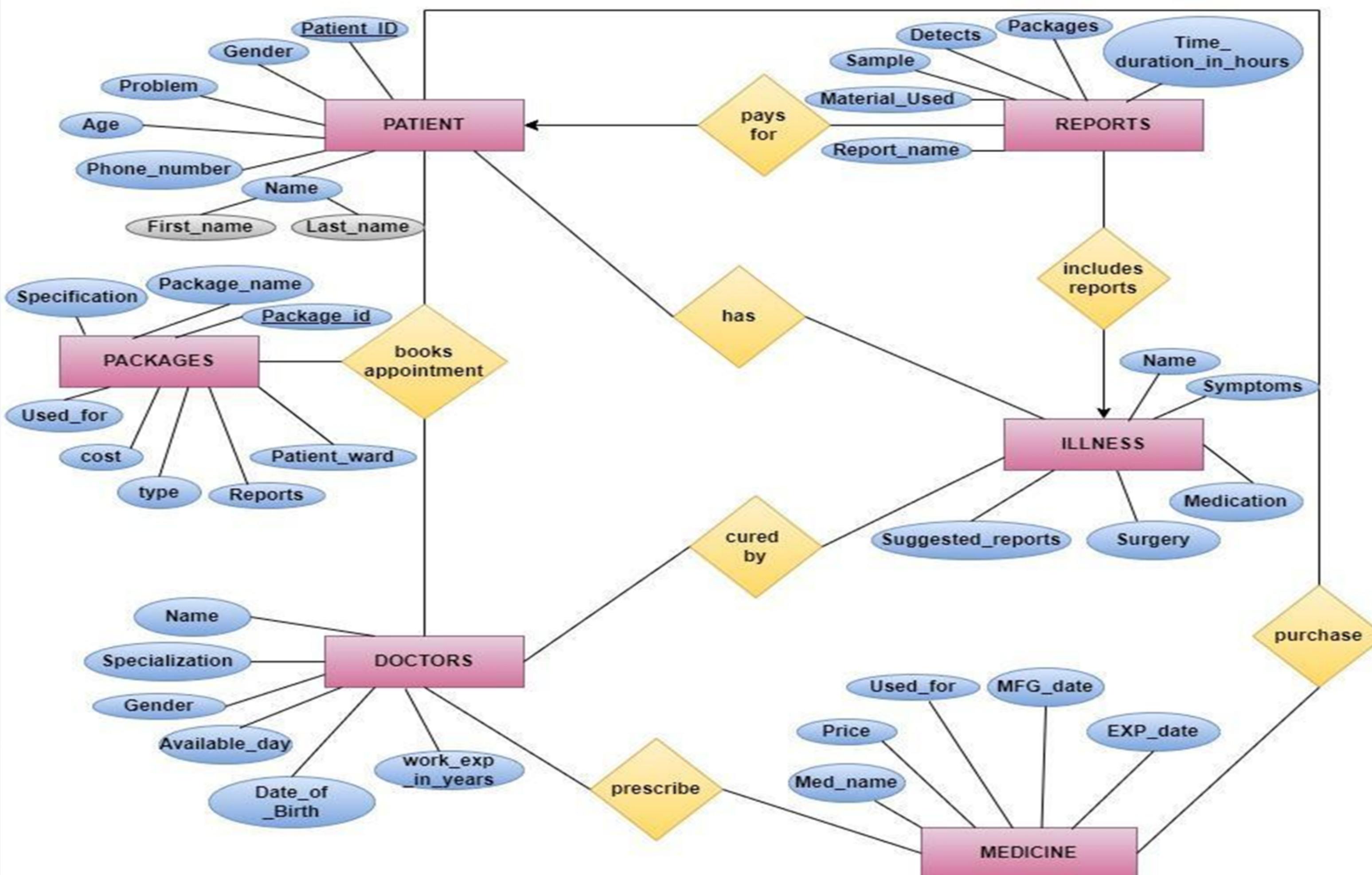
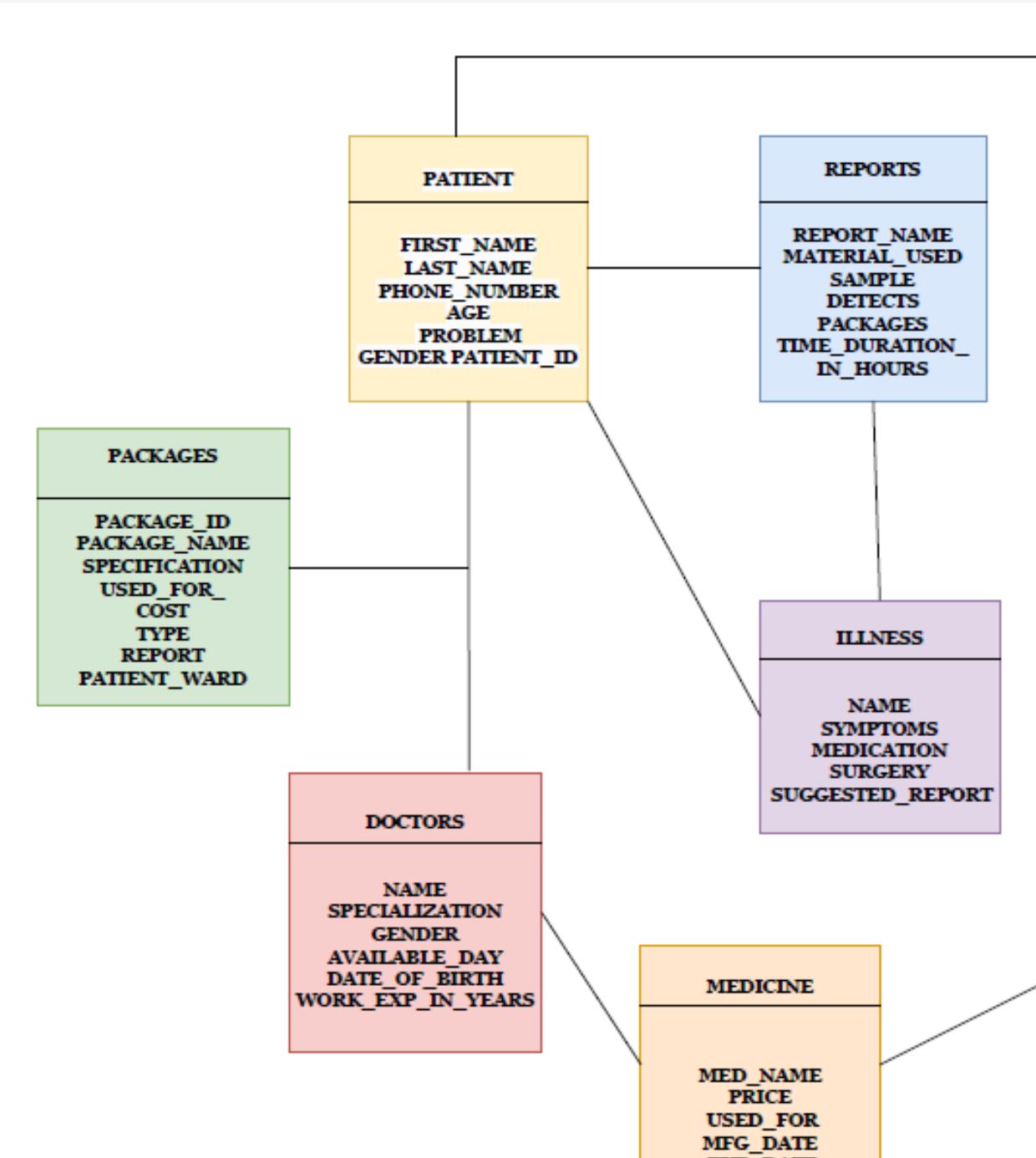


TABLE SCHEMA



TABLES WITH DUMMY DATA

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<p>DOCTOR TABLE</p> <table border="1"> <thead> <tr> <th></th> <th>NAME</th> <th>SPECIALIZATION</th> <th>GENDER</th> <th>DATE OF BIRTH</th> <th>WORK EXP IN YEARS</th> <th>AVAILABLE DAY</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>Binoy Shah</td><td>Dermatologist</td><td>Male</td><td>12-Jan-78</td><td>16</td><td>Tuesday</td><td></td></tr> <tr><td>2</td><td>Kalpana Sanghvi</td><td>Urologist</td><td>Female</td><td>18-Jul-91</td><td>3</td><td>Monday</td><td></td></tr> <tr><td>3</td><td>Siya Sharma</td><td>Dentist</td><td>Female</td><td>24-Sep-83</td><td>10</td><td>Thursday</td><td></td></tr> <tr><td>4</td><td>Rohit Patel</td><td>Heart Surgeon</td><td>Male</td><td>10-Apr-75</td><td>17</td><td>Wednesday</td><td></td></tr> <tr><td>5</td><td>Aakash Shah</td><td>Pediatrician</td><td>Male</td><td>26-Jan-86</td><td>6</td><td>Saturday</td><td></td></tr> <tr><td>6</td><td>Krishna Jain</td><td>Psychiatrist</td><td>Female</td><td>11-Dec-81</td><td>11</td><td>Friday</td><td></td></tr> <tr><td>7</td><td>Rishabh Sheth</td><td>Heart Surgeon</td><td>Male</td><td>15-Nov-85</td><td>8</td><td>Monday</td><td></td></tr> <tr><td>8</td><td>Bhavya Trivedi</td><td>Anesthesiologist</td><td>Male</td><td>23-Mar-71</td><td>20</td><td>Sunday</td><td></td></tr> <tr><td>9</td><td>Ketan Parekh</td><td>Dermatologist</td><td>Male</td><td>19-Dec-82</td><td>12</td><td>Tuesday</td><td></td></tr> <tr><td>10</td><td>Isha Panchal</td><td>Gynecologist</td><td>Female</td><td>26-May-83</td><td>10</td><td>Friday</td><td></td></tr> </tbody> </table>									NAME	SPECIALIZATION	GENDER	DATE OF BIRTH	WORK EXP IN YEARS	AVAILABLE DAY		1	Binoy Shah	Dermatologist	Male	12-Jan-78	16	Tuesday		2	Kalpana Sanghvi	Urologist	Female	18-Jul-91	3	Monday		3	Siya Sharma	Dentist	Female	24-Sep-83	10	Thursday		4	Rohit Patel	Heart Surgeon	Male	10-Apr-75	17	Wednesday		5	Aakash Shah	Pediatrician	Male	26-Jan-86	6	Saturday		6	Krishna Jain	Psychiatrist	Female	11-Dec-81	11	Friday		7	Rishabh Sheth	Heart Surgeon	Male	15-Nov-85	8	Monday		8	Bhavya Trivedi	Anesthesiologist	Male	23-Mar-71	20	Sunday		9	Ketan Parekh	Dermatologist	Male	19-Dec-82	12	Tuesday		10	Isha Panchal	Gynecologist	Female	26-May-83	10	Friday									
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PATIENTS TABLE					
Last Name	Phone Number	Age	Problem	Gender	Patient ID
MEHTA	7658493290	30	pain in left bone	Male	101
PATEL	7658013425	25	ligament injury	Female	102
SHARMA	9876193290	50	pain in chest	Female	103
GUJPTA	8213493290	20	weakness	Female	104
SHAH	9329023459	40	shortness in breathe	Female	105
PATEL	7234593290	45	Visual hallucinations	Female	106

MEDICINE			
PRICE	USED FOR	MFG DATE	EXP DATE
3000	Cancer	20-Dec-23	24-May-24
5000	Blockage in heart	20-Dec-23	24-Mar-24
1000	Damaged Ligaments	20-Dec-23	15-Jun-24
2000	Damaged lungs	20-Dec-23	12-Aug-24
800	Brain Disorder	20-Dec-23	12-Apr-24
200	Mineral Deficiencies	20-Dec-23	12-Feb-24
1500	Pain killer	20-Dec-23	12-Jul-24
500	Gas	20-Dec-23	12-Jan-24
400	Acidity	20-Dec-23	12-Mar-24

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Home

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A B C D E F G H I J K L M N O P Q R S T U V W

ILLNESS

NAME	SYMPTOMS	MEDICATION	SURGERY	SUGGESTED REPORT
Cancer	Bladder Changes and bleeding	suggested by surgeon	if needed	MRI
Bone tumors	Swelling and difficulty in making movement	suggested by surgeon	if needed	CT SCAN
Brain disorders	partial or complete loss of vision and Deafness	suggested by surgeon	not possible	EEG
Blockage in heart	Crushing chest pain and shortness of breath	suggested by surgeon	necessary	CA
Mineral deficiencies	loss of taste and weakness	suggested by surgeon	not necessary	CBC
Damaged ligaments	Severe pain and inability to continue activity	suggested by surgeon	not necessary	MRI
Problems of lungs	Shortness of breath and coughing up mucus	suggested by surgeon	as per suggested	CT SCAN

REPORTS TABLE

REPORT NAME	MATERIALS USED	SAMPLE	DETECTS	PACKAGES	TIME DURATION IN HOURS
MRI	large magnet, radio waves, computer	3D image	Cancer and joint injury	4000	48
CT SCAN	x-ray machine, computer	XRAY IMAGES	bone tumors and lung problems	2000	48
EEG	neoprene cap, Control Box, electrodes	scalp of human body	changes in brain activity	1500	24
CA	radiographic table, x-ray tubes,video monitor	flexible tube is inserted into an artery	blockage in heart and heart abnormalities	5000	72
CBC	automated hematology analyzer	sample of blood	infections and blood count	500	12

CREATE AND INSERT TABLE COMMANDS:

CREATION OF DOCTORS TABLE

```
create table doctors
(
    name varchar(20),
    specialization varchar(30),
    gender varchar(10),
    Available_Day varchar(10),
    date_of_birth date,
    work_exp_in_years int not null
);
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Binoy Shah','Dermatologist','Male','Tuesday','12 January 1978','16');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Kalpana Sanghvi','Urologist','Female','Monday','18 July 1991','3');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Siya Sharma','Dentist','Female','Thursday','24 September 1983','10');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Rohit Patel','Heart Surgeon','Male','Wednesday','10 April 1975','17');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Aakash Shah','Pediatrician','Male','Saturday','26 January 1986','6');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Krisha Jain','Psychiatrist','Female','Friday','11 December 1981','11');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Rishabh Sheth','Heart Surgeon','Male','Monday','15 November 1985','8');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Bhavya Trivedi','Anesthesiologist','Male','Sunday','23 March 1971','20');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Ketan Parekh','Dermatologist','Male','Tuesday','19 December 1982','12');
```

```
INSERT INTO doctors(name,specialization,gender,Available_Day,date_of_birth,work_exp_in_years)
VALUES('Isha Panchal','Gynecologist','Female','Friday','26 May 1983','10');
```

SELECT * from DOCTORS;

NAME	SPECIALIZATION	GENDER	AVAILABLE_DAY	DATE_OF_BIRTH	WORK_EXP_IN_YEARS
Binoy Shah	Dermatologist	Male	Tuesday	12-JAN-78	16
Kalpana Sanghvi	Urologist	Female	Monday	18-JUL-91	3
Siya Sharma	Dentist	Female	Thursday	24-SEP-83	10
Rohit Patel	Heart Surgeon	Male	Wednesday	10-APR-75	17
Aakash Shah	Pediatrician	Male	Saturday	26-JAN-86	6
Krishna Jain	Psychiatrist	Female	Friday	11-DEC-81	11
Rishabh Sheth	Heart Surgeon	Male	Monday	15-NOV-85	8
Bhavya Trivedi	Anesthesiologist	Male	Sunday	23-MAR-71	20
Ketan Parekh	Dermatologist	Male	Tuesday	19-DEC-82	12
Isha Panchal	Gynecologist	Female	Friday	26-MAY-83	10

CREATE AND INSERT TABLE COMMANDS:

CREATION OF MEDICINE TABLE

```
CREATE TABLE MEDICINE
```

```
(  
    MED_NAME VARCHAR2(20),  
    PRICE integer not null,  
    USED_FOR varchar(70),  
    MFG_DATE DATE,  
    EXP_DATE DATE  
);
```

```
SELECT * from MEDICINE;
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Nivolumab','3000','Cancer','20-December-2023','24-May-2024');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Bisoprolol','5000','blockage in heart','20-December-2023','24-March-2024');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Glucosamine Sulphate','1000','Damaged Ligaments','20-December-2023','15-June-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Theophylline','2000','Damages lungs','20-December-2023','12-August-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('topiramate','800','Brain Disorder','20-December-2023','12-April-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Ferrous sulfate','200','Mineral Deficiencies','20-December-2023','12-February-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Aspirin','1500','pain killer','20-December-2023','12-July-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('Gas-X','500','Gas','20-December-2023','12-January-24');
```

```
INSERT INTO MEDICINE (MED_NAME, PRICE, USED_FOR, MFG_DATE , EXP_DATE)  
VALUES('pantoprazole','400','Acidity','20-December-2023','12-March-24');
```

MED_NAME	PRICE	USED_FOR	MFG_DATE	EXP_DATE
Nivolumab	3000	Cancer	20-DEC-23	24-MAY-24
Bisoprolol	5000	blockage in heart	20-DEC-23	24-MAR-24
Glucosamine Sulphate	1000	Damaged Ligaments	20-DEC-23	15-JUN-24
Theophylline	2000	Damages lungs	20-DEC-23	12-AUG-24
topiramate	800	Brain Disorder	20-DEC-23	12-APR-24
Ferrous sulfate	200	Mineral Deficiencies	20-DEC-23	12-FEB-24
Aspirin	1500	pain killer	20-DEC-23	12-JUL-24
Gas-X,	500	Gas	20-DEC-23	12-JAN-24
pantoprazole,	400	Acidity	20-DEC-23	12-MAR-24

CREATE AND INSERT TABLE COMMANDS:

CREATION OF PACKAGES TABLE

```
create table PACKAGES (
    Package_ID number,
    Package_Name varchar(30),
    Specification varchar(40),
    Used_for varchar(30),
    Cost int not null,
    Report varchar2(20),
    Patient_ward varchar2(20),
    Type varchar(20)
);
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('4','Deluxe Heart Screening Package','Detailed heart assessment','heart','5000','Deluxe','not included','included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('1',' Basic Checkup','Body General Checkup','Overall body','1000','Normal','not included','not included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('11','Premium Heart Package','Diagnostics using angiograms','heart','4000','Golden','included','not included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('3','Gastronomial basic checkup','Primary level stomach checkup','stomach','1500','Normal','not included','not included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('7','Premium Heart Package','Diagnostics using angiograms','heart','7000','Premium','included','included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('5','Premium Gastronomial Package','Checkup using GI diagnostics','stomach','3500','Premium','included','included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('6','Neuro Checkup',' Brain health checkup','brain','2000','Normal','not included','not included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('8','Pediatric Neurological Checkup','Basic brain checkup for kids','brain','1000','Normal','not included','not included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('9','Premium Pulmonary Checkup','Advance diagnostics using bronchoscopy','lungs','7000','Premium','included','included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('10','Nephro Premium Package','Diagnostics using biopsy','kidney','7500','Premium','included','included');
```

```
INSERT INTO PACKAGES(Package_ID,Package_Name,Specification,Used_for,Cost,Type,Report,Patient_ward)
VALUES('2',' Heart Screening','Basic heart checkup','heart','3000','Normal','not included','not included');
```

```
SELECT * from PACKAGES;
```

PACKAGE_ID	PACKAGE_NAME	SPECIFICATION	USED_FOR	COST	REPORT	PATIENT_WARD	TYPE
4	Deluxe Heart Screening Package	Detailed heart assessment	heart	5000	not included	included	Deluxe
1	Basic Checkup	Body General Checkup	Overall body	1000	not included	not included	Normal
11	Premium Heart Package	Diagnostics using angiograms	heart	4000	included	not included	Golden
3	Gastronomial basic checkup	Primary level stomach checkup	stomach	1500	not included	not included	Normal
7	Premium Heart Package	Diagnostics using angiograms	heart	7000	included	included	Premium
5	Premium Gastronomial Package	Checkup using GI diagnostics	stomach	3500	included	included	Premium
6	Neuro Checkup	Brain health checkup	brain	2000	not included	not included	Normal
8	Pediatric Neurological Checkup	Basic brain checkup for kids	brain	1000	not included	not included	Normal
9	Premium Pulmonary Checkup	Advance diagnostics using bronchoscopy	lungs	7000	included	included	Premium
10	Nephro Premium Package	Diagnostics using biopsy	kidney	7500	included	included	Premium
2	Heart Screening	Basic heart checkup	heart	3000	not included	not included	Normal

CREATE AND INSERT TABLE COMMANDS:

CREATION OF REPORTS TABLE

```
create table REPORTS
```

```
(  
    Report_Name varchar(70),  
    material_used varchar(70),  
    sample varchar(70),  
    detects varchar(70),  
    packages numeric,  
    time_duration_in_hours int not null
```

```
);
```

```
INSERT INTO REPORTS (Report_Name, material_used, sample, detects,
```

```
packages, time_duration_in_hours)
```

```
VALUES('MRI','large magnet, radio waves, computer',' 3D image','Cancer and joint  
injury.','4000','48');
```

```
INSERT INTO REPORTS (Report_Name, material_used, sample, detects,
```

```
packages, time_duration_in_hours)
```

```
VALUES('CT SCAN','x-ray machine, computer','XRAY IMAGES','bone tumors and lung  
problems.','2000','48');
```

```
INSERT INTO REPORTS(Report_Name, material_used, sample, detects,
```

```
packages, time_duration_in_hours)
```

```
VALUES('EEG','neoprene cap, Control Box, electrodes','scalp of human body','changes in brain  
activity','1500','24');
```

```
INSERT INTO REPORTS(Report_Name, material_used, sample, detects,
```

```
packages, time_duration_in_hours)
```

```
VALUES('CA','radiographic table, x-ray tubes, video monitor','flexible tube is inserted into an  
artery','blockage in heart and heart abnormalities','5000','72');
```

```
INSERT INTO REPORTS(Report_Name, material_used, sample, detects,
```

```
packages, time_duration_in_hours)
```

```
VALUES('CBC','automated hematology analyzer','sample of blood ','infections and blood  
count','500','12');
```

```
SELECT * from REPORTS;
```

REPORT_NAME	MATERIAL_USED	SAMPLE	DETECTS	PACKAGES	TIME_DURATION_IN_HOURS
MRI	large magnet, radio waves, computer	3D image	Cancer and joint injury.	4000	48
CT SCAN	x-ray machine, computer	XRAY IMAGES	bone tumors and lung problems.	2000	48
EEG	neoprene cap, Control Box, electrodes	scalp of human body	changes in brain activity	1500	24
CA	radiographic table, x-ray tubes, video monitor	flexible tube is inserted into an artery	blockage in heart and heart abnormalities	5000	72
CBC	automated hematology analyzer	sample of blood	infections and blood count	500	12

CREATE AND INSERT TABLE COMMANDS:

CREATION OF ILLNESS TABLE

```
create table illness
(
    name varchar(70),
    symptoms varchar(200),
    medication varchar(70),
    surgery varchar(70),
    suggested_report varchar(70)
);
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('Cancer','Bladder Changes and bleeding','suggested by surgeon','if needed','MRI');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('Bone tumors','swelling and difficulty in making movement','suggested by surgeon','if
needed','CT SCAN');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('brain disorders','Partial or complete loss of vision and Deafness','suggested by
surgeon','not possible','EEG');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('blockage in heart','crushing chest pain and shortness of breath','suggested by
surgeon','necessary','CA');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('mineral deficiencies','loss of taste and weakness ','suggested by surgeon','not
necessary','CBC');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('damaged ligaments','Severe pain and inability to continue activity','suggested by
surgeon','not necessary','MRI');
```

```
INSERT INTO illness(name, symptoms, medication, surgery, suggested_report)
VALUES('problems of lungs','shortness of breath and coughing up mucus','suggested by
surgeon','as per suggested','CT SCAN');
```

```
SELECT * from ILLNESS;
```

NAME	SYMPOMS	MEDICATION	SURGERY	SUGGESTED_REPORT
Cancer	Bladder Changes and bleeding	suggested by surgeon	if needed	MRI
Bone tumors	swelling and difficulty in making movement	suggested by surgeon	if needed	CT SCAN
brain disorders	Partial or complete loss of vision and Deafness	suggested by surgeon	not possible	EEG
blockage in heart	crushing chest pain and shortness of breath	suggested by surgeon	necessary	CA
mineral deficiencies	loss of taste and weakness	suggested by surgeon	not necessary	CBC
damaged ligaments	Severe pain and inability to continue activity	suggested by surgeon	not necessary	MRI
problems of lungs	shortness of breath and coughing up mucus	suggested by surgeon	as per suggested	CT SCAN

CREATE AND INSERT TABLE COMMANDS:

CREATION OF PATIENT TABLE

```
CREATE TABLE PATIENT
```

```
(  
    First_NAME VARCHAR2(70),  
    Last_NAME VARCHAR2(70),  
    phone_number varchar(70),  
    AGE INTEGER,  
    problem varchar(70),  
    GENDER CHAR(6),  
    Patient_ID NUMBER(30)  
);
```

```
SELECT * from PATIENT;
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Aditya','Mehta','7658493290','30','pain in left leg bone','Male','101');
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Aneri','Patel','7658013425','25','ligament injury','Female','102');
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Anjali','Sharma','9876193290','50','pain in chest','Female','103');
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Leela','Gujpta','8213493290','20','weakness','Female','104');
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Jaya','Shah','9329023459','40','shortness in breathe','Female','105');
```

```
INSERT INTO PATIENT(First_NAME,Last_NAME,phone_number, AGE, problem,GENDER, Patient_ID)  
VALUES('Krina','Patel','7234593290','45','Visual hallucinations','Female','106');
```

FIRST_NAME	LAST_NAME	PHONE_NUMBER	AGE	PROBLEM	GENDER	PATIENT_ID
Aditya	Mehta	7658493290	30	pain in left leg bone	Male	101
Aneri	Patel	7658013425	25	ligament injury	Female	102
Anjali	Sharma	9876193290	50	pain in chest	Female	103
Leela	Gujpta	8213493290	20	weakness	Female	104
Jaya	Shah	9329023459	40	shortness in breathe	Female	105
Krina	Patel	7234593290	45	Visual hallucinations	Female	106

SQL QUERY

HOSPITAL STORY:

Raghav took his mom to the hospital on Monday because she was experiencing chest pain and shortness of breath.

1) Raghav asked for different packages at the reception desk.

SELECT* FROM PACKAGES;

PACKAGE_ID	PACKAGE_NAME	SPECIFICATION	USED_FOR	COST	REPORT	PATIENT_WARD	TYPE
4	Deluxe Heart Screening Package	Detailed heart assessment	heart	5000	not included	included	Deluxe
1	Basic Checkup	Body General Checkup	Overall body	1000	not included	not included	Normal
11	Premium Heart Package	Diagnostics using angiograms	heart	4000	included	not included	Golden
3	Gastronomial basic checkup	Primary level stomach checkup	stomach	1500	not included	not included	Normal
5	Premium Gastronomial Package	Checkup using GI diagnostics	stomach	3500	included	included	Premium
6	Neuro Checkup	Brain health checkup	brain	2000	not included	not included	Normal
7	Premium Heart Package	Diagnostics using angiograms	heart	7000	included	included	Premium
8	Pediatric Neurological Checkup	Basic brain checkup for kids	brain	1000	not included	not included	Normal
9	Premium Pulmonary Checkup	Advance diagnostics using bronchoscopy	lungs	7000	included	included	Premium
10	Nephro Premium Package	Diagnostics using biopsy	kidney	7500	included	included	Premium
2	Heart Screening	Basic heart checkup	heart	3000	not included	not included	Normal

Out of these packages Raghav only wanted packages which were related to heart problems.

2) Help him short list the packages related to heart problems.

```
select * from PACKAGES  
where USED_FOR='heart';
```

PACKAGE_ID	PACKAGE_NAME	SPECIFICATION	USED_FOR	COST	REPORT	PATIENT_WARD	TYPE
2	Heart Screening	Basic heart checkup	heart	3000	not included	not included	Normal
11	Premium Heart Package	Diagnostics using angiograms	heart	4000	included	not included	Golden
4	Deluxe Heart Screening Package	Detailed heart assessment	heart	5000	not included	included	Deluxe
7	Premium Heart Package	Diagnostics using angiograms	heart	7000	included	included	Premium

3) After getting the list of packages related to heart, make it easy for Raghav to compare the cost of packages.

```
SELECT * FROM PACKAGES  
where USED_FOR='heart'  
ORDER BY cost;
```

PACKAGE_ID	PACKAGE_NAME	SPECIFICATION	USED_FOR	COST	REPORT	PATIENT_WARD	TYPE
2	Heart Screening	Basic heart checkup	heart	3000	not included	not included	Normal
11	Premium Heart Package	Diagnostics using angiograms	heart	4000	included	not included	Golden
4	Deluxe Heart Screening Package	Detailed heart assessment	heart	5000	not included	included	Deluxe
7	Premium Heart Package	Diagnostics using angiograms	heart	7000	included	included	Premium

4) After comparing the cost of all packages help Raghav choose the best package. (WHICH INCLUDES REPORT AND PATIENT WARD).

SELECT * FROM PACKAGES

WHERE USED_FOR='heart' AND REPORT='included' AND PATIENT_WARD='included';

PACKAGE_ID	PACKAGE_NAME	SPECIFICATION	USED_FOR	COST	REPORT	PATIENT_WARD	TYPE
7	Premium Heart Package	Diagnostics using angiograms	heart	7000	included	included	Premium

5) After selecting the package Raghav is given a list of doctors.

select * from DOCTORS;

NAME	SPECIALIZATION	GENDER	AVAILABLE_DAY	DATE_OF_BIRTH	WORK_EXP_IN_YEARS
Binoy Shah	Dermatologist	Male	Tuesday	12-JAN-78	16
Kalpana Sanghvi	Urologist	Female	Monday	18-JUL-91	3
Siya Sharma	Dentist	Female	Thursday	24-SEP-83	10
Rohit Patel	Heart Surgeon	Male	Wednesday	10-APR-75	17
Aakash Shah	Pediatrician	Male	Saturday	26-JAN-86	6
Krishna Jain	Psychiatrist	Female	Friday	11-DEC-81	11
Rishabh Sheth	Heart Surgeon	Male	Monday	15-NOV-85	8
Bhavya Trivedi	Anesthesiologist	Male	Sunday	23-MAR-71	20
Ketan Parekh	Dermatologist	Male	Tuesday	19-DEC-82	12
Isha Panchal	Gynecologist	Female	Friday	26-MAY-83	10

6) Shortlist the doctors specialized in heart surgery.

```
select * from DOCTORS  
where SPECIALIZATION='Heart Surgeon';
```

NAME	SPECIALIZATION	GENDER	AVAILABLE_DAY	DATE_OF_BIRTH	WORK_EXP_IN_YEARS
Rohit Patel	Heart Surgeon	Male	Wednesday	10-APR-75	17
Rishabh Sheth	Heart Surgeon	Male	Monday	15-NOV-85	8

Two specialist are available, one is on Monday and second is on Wednesday.

7) Raghav wants the checkup to be performed as early as possible. Help him book on earliest day possible.(Wednesday).

```
select * from DOCTORS  
where SPECIALIZATION='Heart Surgeon' AND  
AVAILABLE_DAY='Wednesday';
```

NAME	SPECIALIZATION	GENDER	AVAILABLE_DAY	DATE_OF_BIRTH	WORK_EXP_IN_YEARS
Rohit Patel	Heart Surgeon	Male	Wednesday	10-APR-75	17

Raghav goes to meet the doctor on Wednesday.

Raghav's mother has symptoms of crushing chest pain and shortness of breath.

8) Help doctor find what illness can it be (were symptoms are crushing chest pain and shortness of breath).

NAME	SYMPTOMS	MEDICATION	SURGERY	SUGGESTED_REPORT
blockage in heart	crushing chest pain and shortness of breath	suggested by surgeon	necessary	CA

select * from ILLNESS

where SYMPTOMS='crushing chest pain and shortness of breath';

As per the symptoms doctor thinks its blockage of heart but to be sure he has suggested reports.

But before reports, Raghav's mothers name has to be inserted into the patients table.

9) Raghav's mother name is Mita Shah, her age is 65 years, her phone number is 9080706050, she is facing problem of shortness of breath,she is given patient no 107.

INSERT INTO

**PATIENT(FIRST_NAME, LAST_NAME, PHONE_NUMBER, AGE, PROBLEM, GENDER, PATIENT_ID)
VALUES('Mita', 'Shah', '9080706050', '56', 'shortness of breath', 'Female', '107');**

1 row(s) inserted.

FIRST_NAME	LAST_NAME	PHONE_NUMBER	AGE	PROBLEM	GENDER	PATIENT_ID
Aditya	Mehta	7658493290	30	pain in left leg bone	Male	101
Aneri	Patel	7658013425	25	ligament injury	Female	102
Anjali	Sharma	9876193290	50	pain in chest	Female	103
Leela	Gupta	8213493290	20	weakness	Female	104
Jaya	Shah	9329023459	40	shortness in breathe	Female	105
Krina	Patel	7234593290	45	Visual hallucinations	Female	106
Mita	Shah	9080706050	56	shortness of breath	Female	107

After inserting her name in patients table, Raghav takes her mom for the reports.

Raghav's mother had symptoms of crushing chest pain and shortness of breath.

10) Help him find the suggested report from the symptoms.

**select SUGGESTED_REPORT from ILLNESS
WHERE SYMPTOMS LIKE 'c%';**

SUGGESTED_REPORT
CA

After finding the suggested report based on the symptoms.

11) Help Raghav to find how much time will be needed for the report.

**select TIME_DURATION_IN_HOURS from REPORTS
where REPORT_NAME='CA';**

TIME_DURATION_IN_HOURS
72

After knowing the time, Raghav wants to know what type of samples are taken.

12) Help Raghav to know the type of sample and material used for taking the sample.

```
SELECT REPORT_NAME,MATERIAL_USED,SAMPLE FROM REPORTS  
WHERE TIME_DURATION_IN_HOURS BETWEEN 70 AND 80;
```

REPORT_NAME	MATERIAL_USED	SAMPLE
CA	radiographic table, x-ray tubes, video monitor	flexible tube is inserted into an artery

After the reports were performed, while checking the reports it was found that Raghav's mother's age was inserted wrong in the patients information.

13) Update Raghav's mother's age in the patient table.

UPDATE PATIENT

SET AGE = 65

where PATIENT_ID='107';

1 row(s) updated.

FIRST_NAME	LAST_NAME	PHONE_NUMBER	AGE	PROBLEM	GENDER	PATIENT_ID
Aditya	Mehta	7658493290	30	pain in left leg bone	Male	101
Aneri	Patel	7658013425	25	ligament injury	Female	102
Anjali	Sharma	9876193290	50	pain in chest	Female	103
Leela	Gupta	8213493290	20	weakness	Female	104
Jaya	Shah	9329023459	40	shortness in breathe	Female	105
Krina	Patel	7234593290	45	Visual hallucinations	Female	106
Mita	Shah	9080706050	65	shortness of breath	Female	107

After looking at the reports, surgery was performed and was successful. Doctor prescribed a medicine for blockage in heart to decrease pain.

14) Help Raghav to know the name,manufacturing date and expiry date of the medicine (medicine used for blockage in heart) .

**select MED_NAME,MFG_DATE,EXP_DATE from MEDICINE
where USED_FOR='blockage in heart';**

MED_NAME	MFG_DATE	EXP_DATE
Bisoprolol	20-DEC-23	24-MAR-24

15) As the dosage of medicine is very high, he recommended to take some medicines for acidity,gas.

**select * from MEDICINE
where USED_FOR='Gas' or USED_FOR='Acidity';**

MED_NAME	PRICE	USED_FOR	MFG_DATE	EXP_DATE
Gas-X,	500	Gas	20-DEC-23	12-JAN-24
pantoprazole,	400	Acidity	20-DEC-23	12-MAR-24



THANK YOU