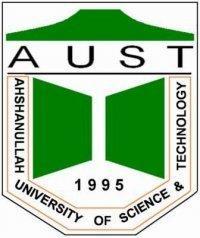
**Ahsanullah University of Science and Technology**



**Distributed Database Lab**



**CSE 4126**



***Project name:*** National patient Management System.

***Submitted by:***

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***Submitted to:***

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National Patient management system

**Project Abstract:**

This will be a database of patient management system which will be able to be operated nationally. There will be the information of all patients around Bangladesh so that when a patient will go to a new doctor at new hospital, they will be able to check his/her past history through this database. So, the diagnosis will be more perfect and easy for the doctor and patient will be benefited at most.

**User of this database:**

Hospital authority.

**Need of having distributed database for this project:**

As this will be a national patient database so the data will be entered from every hospital around Bangladesh. That’s why we need distributed database management system.

**Global relations of this project:**

**Doctors** (dr\_id, dr\_name, dr\_age, dr\_sex , dr\_phn,dr\_email, dr\_hospital\_chamber, designation, degree, department, experience, time,

Fee, day, primary key (dr\_id))

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**Reports** (rep\_id, rep\_date, impression, primary key(rep\_id))

**Medicine** (med\_id, med\_name, med\_generic\_name,med\_company, med\_work, med\_per\_price, primary key (med\_id))

**Diagnosis** (dia\_id, dia\_name, dia\_cost, dia\_requirements,dia\_hospital, rep\_id, primary key (dia\_id), foreign key(rep\_id) references reports(rep\_id))

**History** (his\_id, his\_date, problem, rep\_id, dr\_id, med\_id,primary key (his\_id), foreign key(rep\_id) references

reports(rep\_id),foreignkey(dr\_id)references

doctors(dr\_id), foreign key(med\_id) references medicine(med\_id))

**Surgical\_history** (s\_his\_id, s\_date, s\_name, s\_hospital,s\_cost, dr\_id, primary key (s\_his\_id), foreign key(dr\_id) references doctors(dr\_id))

**Patient** (pt\_id, pt\_name, pt\_age, pt\_sex, pt\_phn, pt\_house,pt\_road, pt\_block, pt\_section, pt\_district, bl\_grp, weight, height, dia\_id, his\_id, s\_his\_id, primary key (pt\_id), foreign key(dia\_id) references diagnosis(dia\_id), foreign

key(his\_id) references history(his\_id), foreign key(s\_his\_id) references surgical\_history(s\_his\_id))

**Functions and procedures of the database:**

* **Function 1 (blood\_group):**

This is a function which counts the patients of same blood group of given ID as parameter.

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* **Procedure 2 (same\_bl\_group):**

This is a procedure which gives the patients ID, corresponding number of patients of same blood group and corresponding blood group (fetched from the cursor) using function 1.

* **Function 3 (dr):**

This is a function which finds the doctor ID who hasn’t done any surgery till now (this works for only single ID).

* **Function 4 (rep):**

This is a function which counts the patients who have report impression as ‘normal report’.

* **Procedure 5 (rep\_date):**

This is a procedure which gives the patients’ ID and name whose reports were made on 21-05-2016.

* **Procedure 6 (his):**

This is a procedure which shows the history date and problem of a patient.

* **Procedure 7 (shis):**

This is a procedure which gives the patients’ name and phone number whose surgical cost was greater than 60 thousands.

* **Procedure 8 (dd):**

This is a procedure which shows the name and designation of the doctor who operated on desired patient.

* **Blood\_group\_find:**

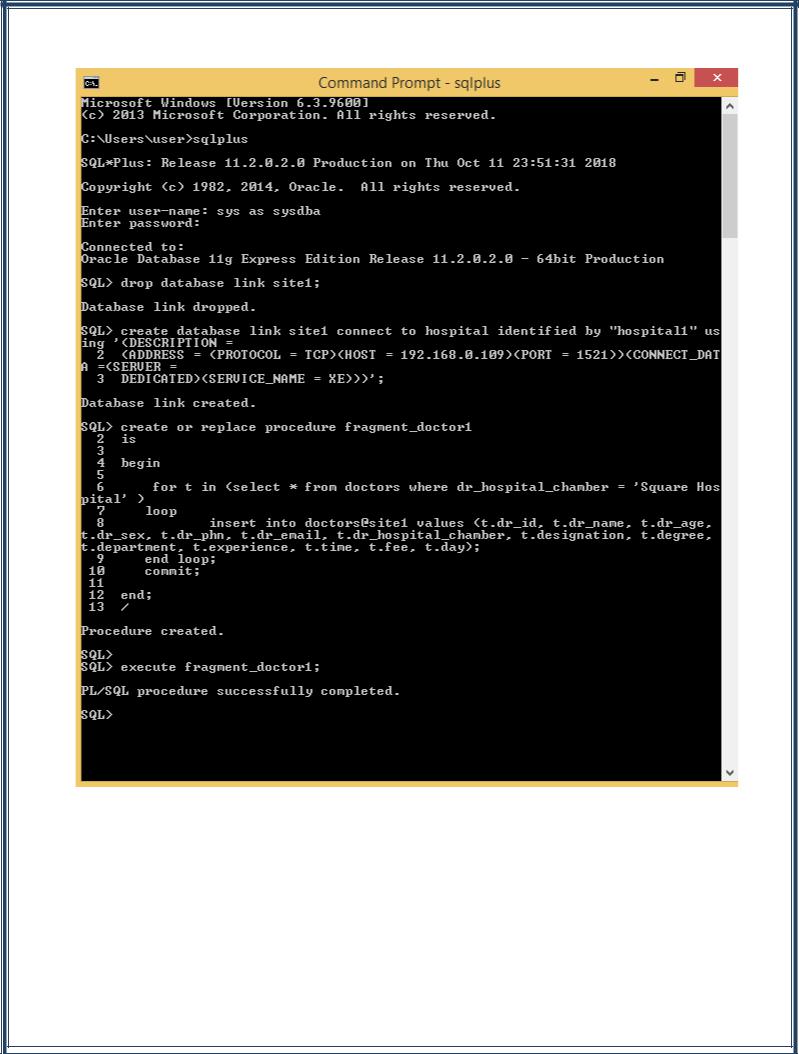
Search patient of a special blood group from server at site.

**Fragments of this project:**

Doctors1 = SL dr\_hospital\_chamber=”Square Hospital” Doctors

Doctors2 = SL dr\_hospital\_chamber =”Medinova Diagnostic” Doctors

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**Sites of this project:**

Site1 (Square Hospital) : Doctors1, patient, reports, medicine, diagnosis, history, surgical\_history.

Site2 (Apollo Hospital) : Doctors2, patient, reports, medicine, diagnosis, history, surgical\_history.

**Triggers of this project:**

Trigger 1: There are two tables at site 1 where male and female patients are differentiated.

Trigger 2: There is a new table at site 1 when a phone number of a patient is changed it is stored there.

**Level-3 distribution transparency:**

When Square changes their medicine price it will be updated

on server too.

Select med\_name, med\_generic\_name, med\_company, med\_work into $med\_name, $med\_generic\_name, $med\_company, $med\_work from medicine where med\_id = 02

IF #FOUND then,

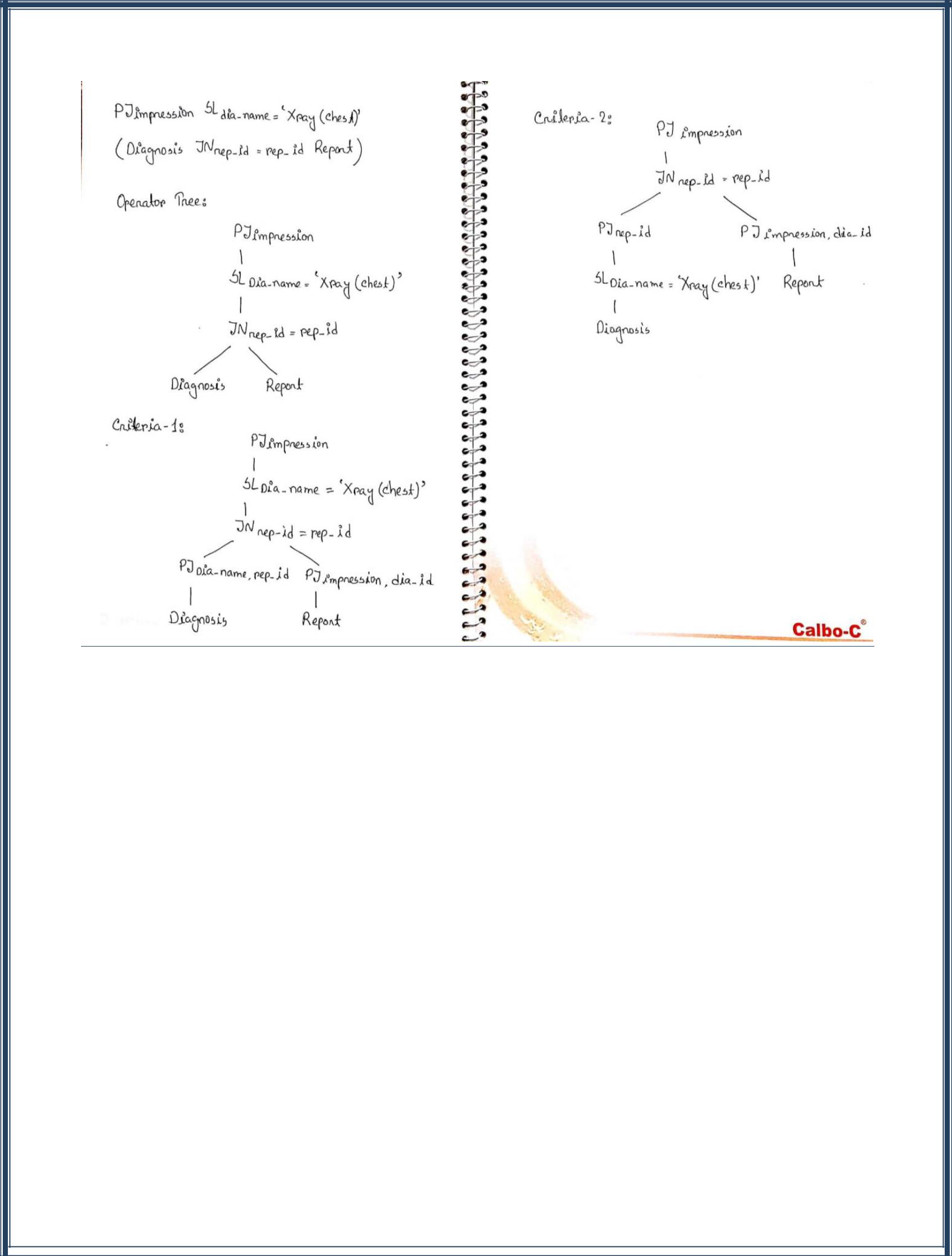
Delete medicine at site1 where med\_id = 02;

Insert into medicine at site1: (02, $med\_name, $med\_generic\_name, $med\_company, $med\_work, “35tk”);

Delete medicine at server where med\_id = 02;

Insert into medicine at server: (02, $med\_name, $med\_generic\_name, $med\_company, $med\_work, “35tk”);

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**Operator Tree:**

**Conclusion:**

We have tried our best to implement a patient management database system. Hope this will help to maintain patient history if implemented nationally.

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