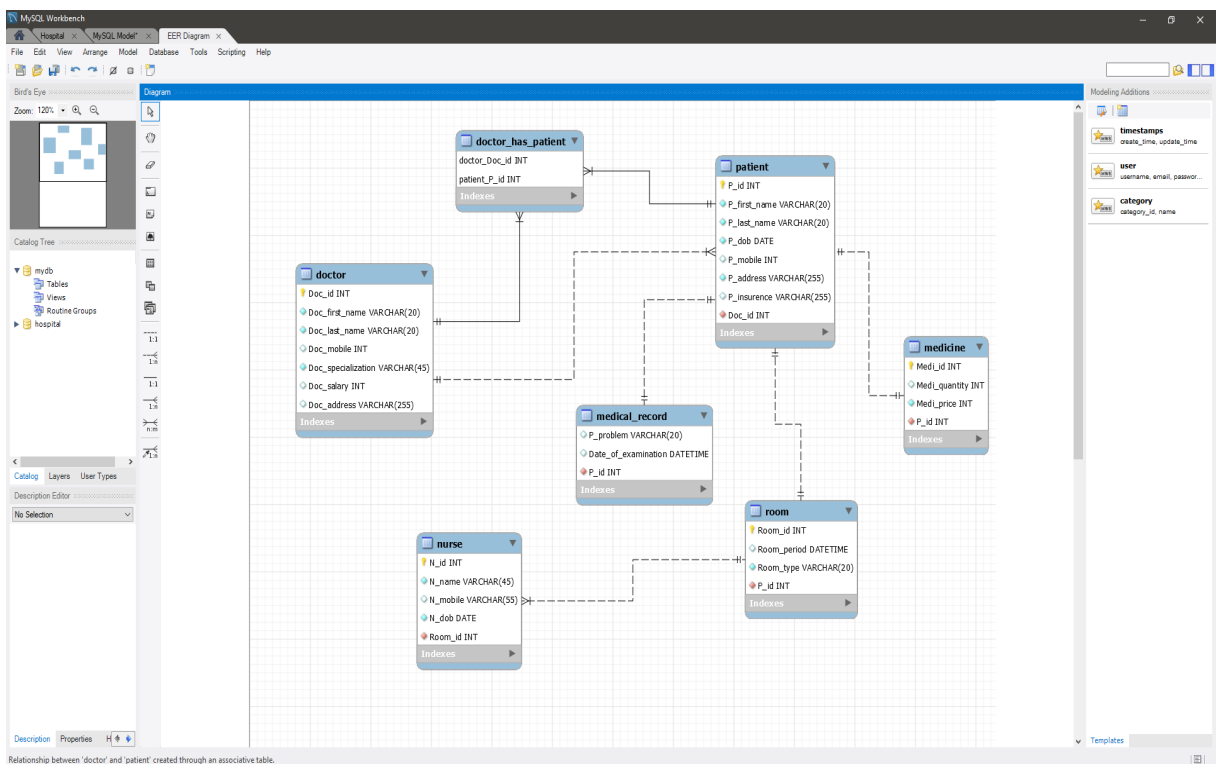# DBMS ASSIGNMENT-2

HOSPITAL DATABASE

1. Showcased a many-many relation between doctor and Patient using doctor_has_patients entity.

2.
   - Composite Keys : In doctor_has_patients : Primary Key (doctor_Doc_id,patient_P_id)
   - Weak Entity : doctor_has_patients , medicine, medical_report, room

ER Diagram Of Hospital Database

3. • Checking Primary Key and Unique Constraint :

Inserting Doctor's details into tables :

Inserting Patient's details into tables :

When Trying to insert duplicate value for attribute P_id of Patients table which is a primary key :
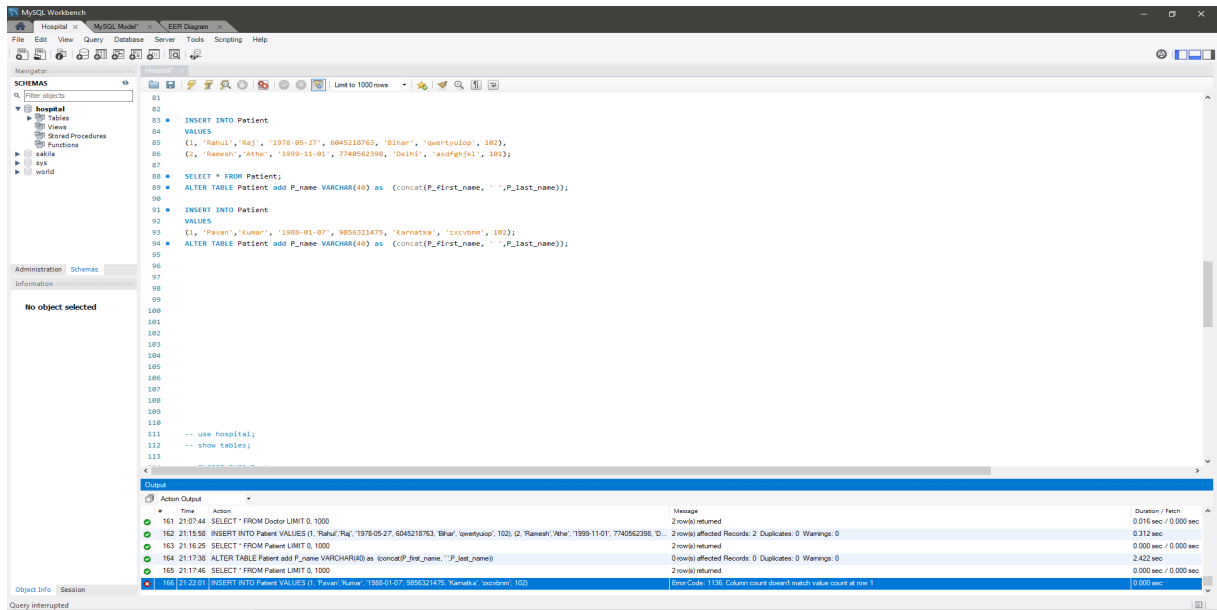
- Checking Not Null and Default Constraint :
  (a) When Trying to insert null value for attribute Doc_id of Doctor table which is specified as not null :
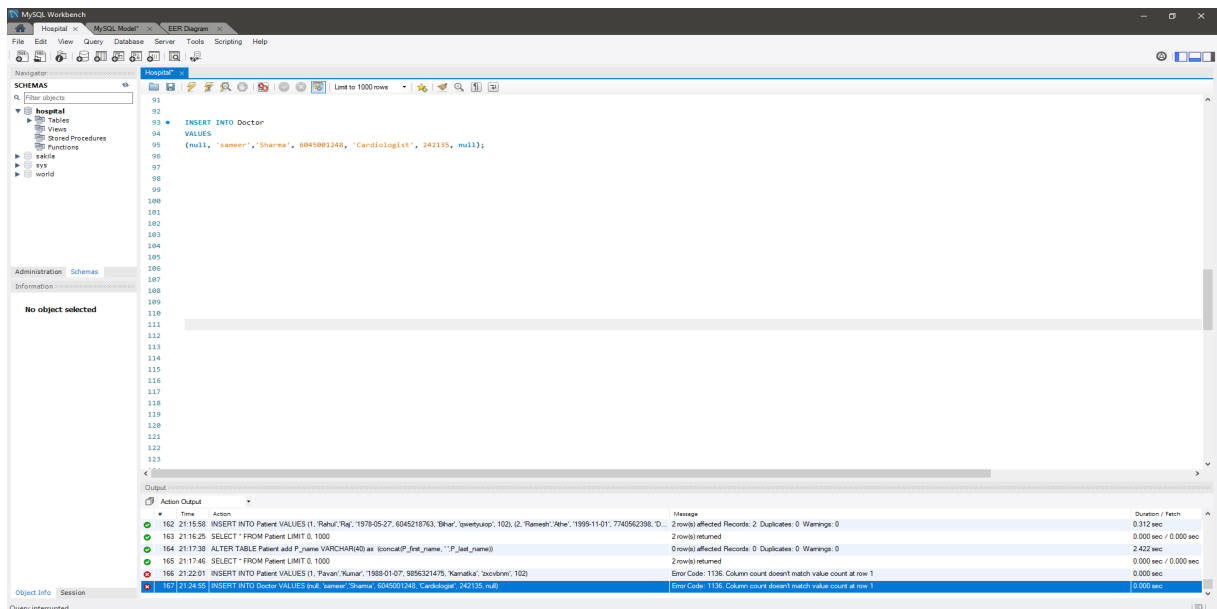
(b) When Trying to insert values into room table in which the attribute room_type doesn't have any default value :
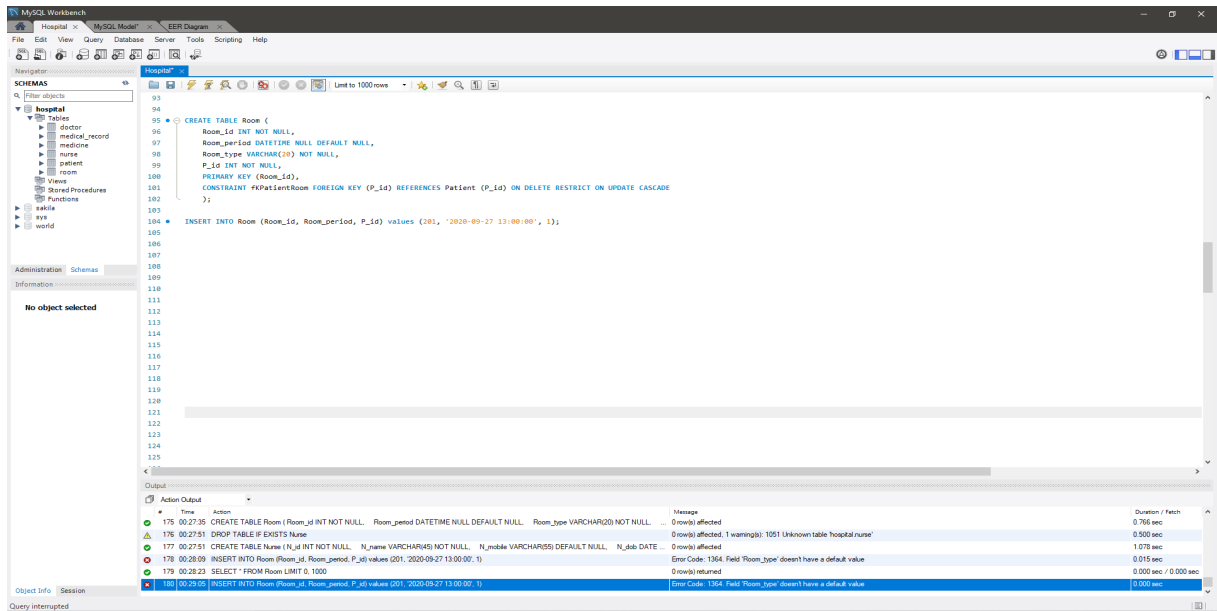
4. Derived Attributes :

- Doc_name attribute of Doctor table:
  Dependant on/Derived from concatenation of Doc_first_name and Doc_last_name attributes of Doctor table.
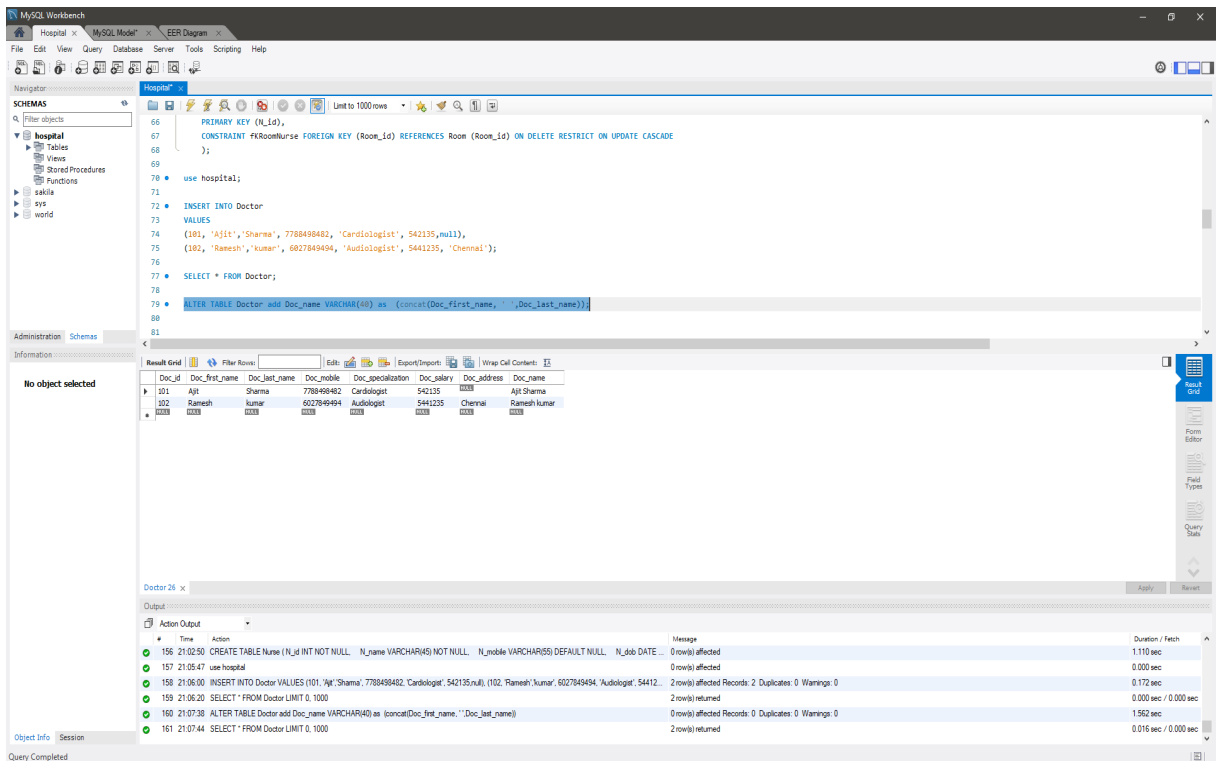
5. Inserting tuples into dependant table of a foreign key constraint first.

Patient table is dependant on Doctor table for getting Doc_id which is the foreign key of the table. If we insert data into Doc_id column of Patient table without inserting any data into Doctor table then :

Hospital × | MySQL Model* × | EER Diagram ×

File Edit View Query Database Server Tools Scripting Help

Hospital* ×

Limit to 1000 rows

SCHEMAS

Filter objects

▼ hospital
  ▼ Tables
    ▶ doctor
    ▶ medical_record
    ▶ medicine
    ▶ nurse
    ▶ patient
    ▶ room
  ▶ Views
  ▶ Stored Procedures
  ▶ Functions
▶ sakila
▶ sys
▶ world

Administration Schemas

Information

No object selected

```
82        VALUES
83        (1, 'Rahul','Raj', '1978-05-27', 6045218763, 'Bihar', 'qwertyuiop', 102),
84        (2, 'Ramesh','Athe', '1999-11-01', 7740562398, 'Delhi', 'asdfghjkl', 101);
85
86  ●   ALTER TABLE Patient add P_name VARCHAR(40) as (concat(P_first_name, ' ',P_last_name));
87  ●   DROP TABLE Room;
88
89
90  ●   SELECT * FROM Patient;
91
92  ●   SELECT * FROM Doctor;
93
94  ●   INSERT INTO Patient
95        VALUES
96        (3, 'Amit','Modi', '1983-01-01', 9876543210, 'UP', 'qwertyuio', 104);
97
98
99
100
101
102
103
104
105
106
107
108
109   |
110
111
112
113
114
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
● 216	00:56:09	INSERT INTO Patient VALUES (1, 'Rahul','Raj', '1978-05-27', 6045218763, 'Bihar', 'qwertyuiop', 102), (2, 'Ramesh','Athe', '1999-11-01', 7740562398, 'D...	2 row(s) affected Records: 2 Duplicates: 0 Warnings: 0	0.765 sec
● 217	00:56:15	INSERT INTO Patient VALUES (1, 'Rahul','Raj', '1978-05-27', 6045218763, 'Bihar', 'qwertyuiop', 102), (2, 'Ramesh','Athe', '1999-11-01', 7740562398, 'D...	Error Code: 1062. Duplicate entry '1' for key 'patient.PRIMARY'	0.000 sec
● 218	00:56:34	SELECT * FROM Patient LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
● 219	00:58:22	SELECT * FROM Doctor LIMIT 0, 1000	2 row(s) returned	0.016 sec / 0.000 sec
● 220	00:58:33	SELECT * FROM Patient LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
● 221	00:59:02	INSERT INTO Patient VALUES (3, 'Amit','Modi', '1983-01-01', 9876543210, 'UP', 'qwertyuio', 104)	Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('hospital'.'patient', CONSTRAINT 'fkDoctorPatients' FOREIGN KEY (...	0.140 sec

Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails ('hospital'.'patient', CONSTRAINT 'fkDoctorPatients' FOREIGN KEY ('Doc_id') REFERENCES 'doctor' ('Doc_id') ON DELETE RESTRICT ON UPDATE CASCADE)

Object Info Session

Query interrupted