

Godavari Foundation's
Godavari College of Engineering, Jalgaon
Department of Computer

Lab Manual

Database System Laboratory

Practical No:- _____

Date:- _____

Name of Student:- _____

Class:- _____

Roll No:- _____

Title:

Aim: -

Software Requirement: _____

Hardware Requirement:- _____

Theory:-

Hospital Management System

A database is a collection of information and is systematically stored in tables in the form of rows and columns. The table in the database has unique name that identifies its contents. The

database in turn is further described in detail giving all the fields used with the data types, constraints available, primary key and foreign key.

Database design is used to manage large bodies of information.

Data types and its description:-

Fields in database table have a data type. Some of the data types used in database table are explained below.

a)Integer:-

One optional sign character (+ or -) followed by atleast one digit (0-9). Leading and trailing blanks are ignored. No other character is allowed.

b)Varchar:-

It is used to store alpha numeric characters. In this data type we can set the maximum number of characters upto 8000 ranges by default SQL server will set the size to 50 characters large.

c)Date/Time:-

Date/Time data type is used for representing data or time.

Patient Table:-

| Fields | Data | TypeRelationships |
|---------------|-------------|--------------------------|
| Pid | Varchar(5) | Primary Key |
| Name | Varchar(20) | Not Null |
| Age | int | Not Null |
| Weight | int | Not Null |
| Gender | Varchar(10) | Not Null |
| Address | Varchar(50) | Not Null |
| Phoneno | int | Not Null |
| Disease | Varchar(20) | Not Null |
| Doctored | Varchar(5) | Not Null |

Doctor Table:

| Fields | Data Type | Relationships |
|---------------|------------------|----------------------|
| doctorid | Varchar(5) | Primary Key |
| doctordname | Varchar(15) | Not Null |
| dept | Varchar(15) | Not Null |

Lab Table:-

| Fields | Data Type | Relationships |
|--------------|-------------|---------------|
| labno | Varchar(5) | Primary Key |
| pid | Varchar(5) | Not Null |
| weight | int | Not Null |
| doctorid | Varchar(5) | Foreign Key |
| date | Date/Time | Not Null |
| category | Varchar(15) | Not Null |
| patient_type | Varchar(15) | Not Null |
| amount | int | Not Null |

Inpatient Table:-

| Fields | Data Type | Relationships |
|-------------|-------------|---------------|
| pid | Varchar(5) | Primary Key |
| room_no | Varchar(50) | Not Null |
| date_of_adm | Date/Time | Not Null |
| date_of_dis | Date/Time | Not Null |
| advance | int | Not Null |
| labno | Varchar(5) | Foreign Key |

Outpatient Table:-

| Fields | Data Type | Relationships |
|--------|------------|---------------|
| pid | Varchar(5) | Primary Key |
| date | Date/Time | Not Null |
| labno | Varchar(5) | Foreign Key |

Room Table:-

| Fields | Data Type | Relationships |
|-----------|-------------|---------------|
| room_no | Varchar(50) | Primary Key |
| room_type | Varchar(10) | Not Null |
| status | Varchar(10) | Not Null |

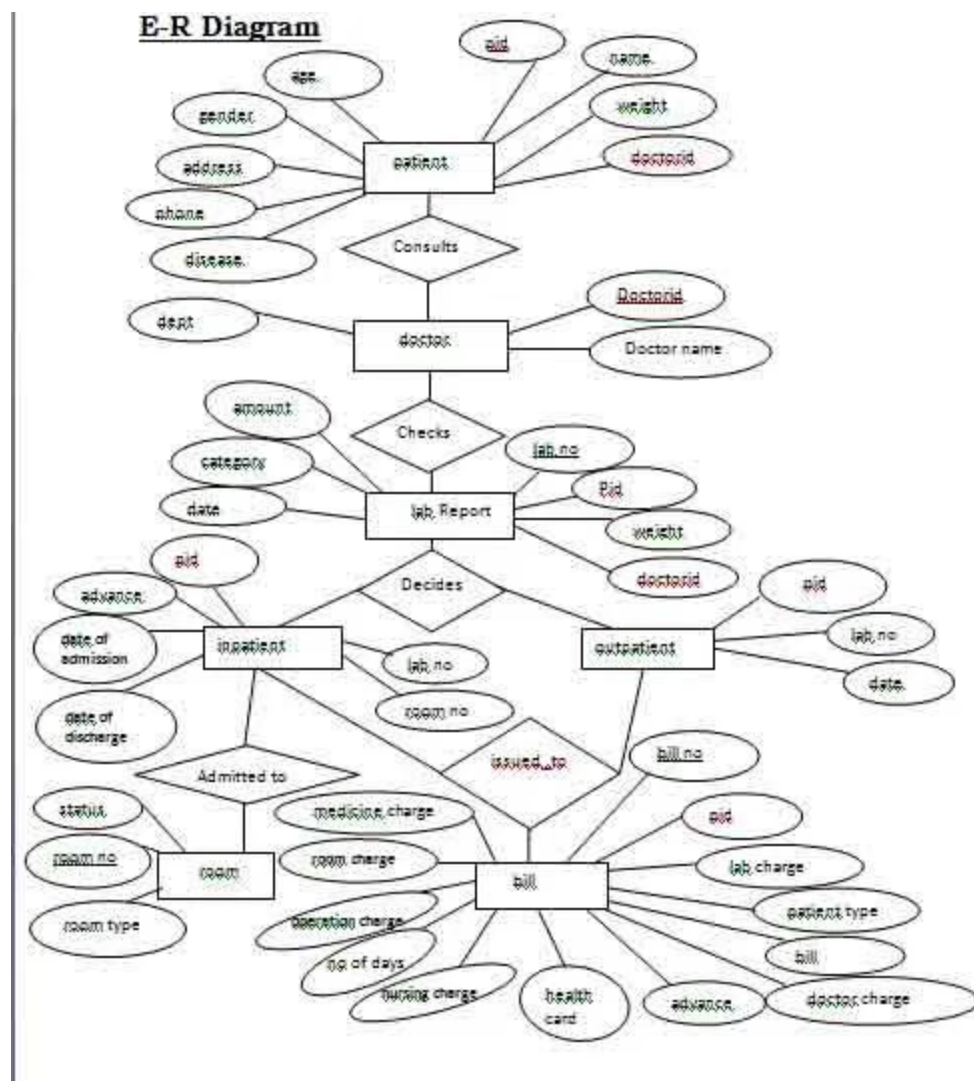
Bill Table:-

| Fields | Data Type | Relationships |
|-----------------|-------------|---------------|
| bill_no | Varchar(50) | Primary Key |
| pid | Varchar(5) | Foreign Key |
| patient_type | Varchar(10) | Allow Null |
| doctor_charge | int | Not Null |
| medicine_charge | int | Not Null |
| room_charge | int | Not Null |
| oprtn_charge | int | Allow Null |

| | | |
|----------------|-------------|------------|
| no_of_days | int | Allow Null |
| nursing_charge | int | Allow Null |
| advance | int | Allow Null |
| health_card | Varchar(50) | Allow Null |
| lab_charge | int | Allow Null |
| bill | int | Not Null |

E-R Diagram:-

Entity relationship diagram is used in modern database software engineering to illustrate logical structure of database. It is a relational schema database modeling method used to model a system and approach. This approach commonly used in database design. The diagram created using this method is called E-R diagram.



MYSQL QUERIES

mysql> create table Patient

- > (Pid Varchar(5) Primary Key,
- > Name Varchar(20) Not Null,
- > Age int Not Null,
- > Weight int Not Null,
- > Gender Varchar(10) Not Null,
- > Adress Varchar(50) Not Null,
- > Phoneno int Not Null,
- > Disease Varchar(20) Not Null,
- > Doctored Varchar(5) Not Null);

mysql> create table Doctor(

- > doctorid Varchar(5) Primary Key,
- > doctortname Varchar(15) Not Null,
- > dept Varchar(15) Not Null);

mysql> create table Lab(labno Varchar(5) Primary Key,

- >pid Varchar(5) Not Null,
- >weight int Not Null,
- >doctorid Varchar(5),
- >date Date Not Null,
- >category Varchar(15) Not Null,
- >patient_type Varchar(15) Not Null,
- >amount int Not Null,
- >constraint doctorid_fk Foreign Key(doctorid) references Doctor(doctorid));

mysql> create table Inpatient(

- >pid Varchar(5) Primary Key,
- >room_no Varchar(50) Not Null,
- >date_of_adm Date Not Null,
- >date_of_dis Date Not Null,
- >advance int Not Null,
- >labno Varchar(5),
- >constraint labno_fk Foreign Key(labno) references Lab(labno));

mysql> create table Outpatient(

- >pid varchar(5) Primary Key,
- >date Date Not Null,
- >labno Varchar(5),
- >constraint labno_fk1 Foreign Key(labno) references Lab(labno));

mysql> create table Room(

- > room_no Varchar(50) Primary Key,
- > room_type Varchar(10) Not Null,

-> status Varchar(10) Not Null);

mysql> create table Bill(

-> bill_no Varchar(50) Primary Key,

-> pid Varchar(5),

-> patient_type Varchar(10),

-> doctor_charge int Not Null,

-> medicine_charge int Not Null,

-> room_charge int Not Null,

-> oprtn_charge int,

-> no_of_days int,

-> nursing_charge int,

-> advance int,

-> health_card Varchar(50),

-> lab_charge int,

-> bill int Not Null,

-> constraint pid_fk Foreign Key(pid) references Inpatient(pid));

Conclusion:-
