

## DDL/ DML SQL Queries

Create, drop, alter, constraints, select, insert, update and delete

**Q1.** Create a table Patient with following fields

- PatientID varchar (15) (PatientID is primary key) (should be assigned automatically)
- Name varchar (15) (should not be null)
- Age int
- Gender varchar(5)
- Address varchar(20)
- Disease varchar(10)
- DoctorID varchar(15)

Also add a *CHECK* constraint to only allow patients above 5 years old.

**Q2.** Change the datatype of Gender from varchar(5) to char in the Patient table using the *ALTER* command.

**Q3.** Create a table Doctor with following fields

- DoctorID varchar (15) (DoctorID is primary key) (should be assigned automatically)
- Name varchar (15) (should not be null)
- Age int
- Gender char
- Address varchar(20)

The doctor's age should be above 18. Add this constraint using *CHECK*.

**Q4.** Now add column DrSpecialization varchar(20) in the Doctor table.

**Q5.** There is no relationship between the Patient and Doctor table, so make a relation between these two tables using the *ALTER* command. Note DoctorID in Patient, should be foreign key from Doctor table.

**Q6.** Create a table LabTest with following fields

- LabID varchar (15) (LabID is primary key)
- LabNo varchar (10) (should be unique)
- TestDate date **DEFAULT: today's date**
- TestAmount double
- PatientID varchar(15) (foreign key)
- DoctorID varchar(15) (foreign key)

**Q7.** Create a table PatientBill with following fields

- BillID varchar (15) (BillID is Primary key)
- BillDate date
- Amount varchar(20)
- PatientID varchar(15) (foreign key)
- DoctorID varchar(15) (foreign key)

**Q8.** Hospital cancels lab tests so remove table LabTest from database using *DROP* command.

**Q9.** Now add information of 4 doctors

**Q10.** Add 4 patients record

**Q11.** Add 2 patient bills.

**Q12.** Now show your record using a select query. Also show a patient bill exceeding Rs 100.

**Q13.** Delete all data of PatientBill table with one query (**table and its attributes should not be deleted**)

**Q14.** Delete record of 1 patient by the help of his/her name

**Q15.** Update all patients with the **severe flu** disease to **COVID**.

**Practice(Ungraded):** Make a database for a publishing house storing books with their authors and publication numbers for each edition. Think about suitable attributes while some are: Author(authorid, name,..) Book(bookid,authorid, copies, publishdate,...). Alter schema if a book can be written by multiple authors eg John & Hans wrote Primordial.