**LAB 2**

Consider the tables given below:

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| **DOCTOR** | | |
| DID | INT | Primary key |
| DNAME | VARCHAR(25) |  |
| SPECIALIZATION | VARCHAR(20) | Default ‘general’ |
| AADHAR\_NO | VARCHAR(12) | unique |
| CONSULTATION\_FEE | NUMERIC(5,2) | Constraint C1 Check (Consultation\_fee > 50) |
| CITY | VARCHAR(20) |  |

|  |  |  |
| --- | --- | --- |
| **TREATMENT** | | |
| DID | INT | references doctor (DID) on delete cascade |
| PID | INT | references patient (PID) on delete set null |
| DIAGNOSIS | VARCHAR(30) | Not null |
| TREAT\_ID | INT |  |
| TREAT\_DATE | DATE |  |

|  |  |  |
| --- | --- | --- |
| **PATIENT** | | |
| PID | INT | Primary key |
| PNAME | VARCHAR(25) |  |
| DATE\_OF\_BIRTH | DATE |  |
| ADDRESS | VARCHAR(20) |  |

1. Create the tables as per the instructions given and insert suitable data.
2. Add a column called SPECIAL\_FEE with datatype NUMERIC(5,2) to DOCTOR table
3. Add a check constraint to show that SPECIAL\_FEE > CONSULTATION\_FEE
4. Using alter command, Drop the constraint C1.
5. Add a column AADHAR\_NUMBER to patient table with UNIQUE constraint.
6. Add NOT NULL constraint to the DATE\_OF\_BIRTH column of PATIENT table.
7. Add constraint CON1 UNIQUE(TREAT\_ID, TREAT\_DATE) in table TREATMENT
8. Insert suitable data to the table TREATMENT.
9. Delete a doctor from DOCTOR table to see the cascade result.
10. Display the name of the doctors whose consultation fees are even.
11. Find the doctors whose name starts with ‘K’ and ends with ‘n’
12. Find the patients whose name starts with ‘A’ and is followed by 2 characters only.
13. Find the doctors whose name starts with ‘J’ or ‘L’
14. Find the doctors whose specialization is ‘E.N.T’ and consultation fee is more than 60
15. Find the doctors whose consultation fee is between 50 and 100
16. Arrange the doctors in the descending order of name as well as city.
17. List the specialization of doctors without duplicate values.
18. Find the total number of doctors.
19. Find the number of doctors with ‘E.N.T’ specialization.
20. Find the number of patients who were treated by a doctor with ID = 1;
21. Find the doctors specialized in ‘E.N.T’, ‘Cardiac’, ’Paediatrics’ (Use IN)
22. Find the average consultation fee, maximum consultation fee and minimum consultation fee of doctors.
23. Find the sum of special fee of doctors with ‘Paediatrics’ specialization.
24. Display the name of doctors under a column with heading ‘DOCTOR\_NAME’ instead of DNAME which is the name of your column.
25. Display the total fee i.e. special fee + consultation fee, for each doctor. (Use heading ‘TOTAL\_FEE’)
26. Find the number of doctors with no adhar number given. (i.e. is null).
27. Find the number of doctors with adhar number given. (i.e. is not null)
28. Find the doctors whose CONSULTATION FEE is greater than 100 and SPECIALIZATION is Cardiac or coming from Kollam.
29. Find the result of the query: select \* from doctor order by 3;
30. Concatenate the name of the doctor with the specialization he/she is having. (e.g. Reghu is specialized in E.N.T.)