PES UNIVERSITY, RR CAMPUS

DBMS LAB WEEK 3

ANANYA UPPAL

SECTION: A

DATE: 19th September

Task 1

Implement the given commands using PostgreSQL.

1. Create Database

```
SQL Shell (psql)
Server [localhost]:
Database [postgres]:
Port [5432]:
Username [postgres]:
Password for user postgres:
psql (13.4)
WARNING: Console code page (437) differs from Windows code page (1252)
         8-bit characters might not work correctly. See psql reference
         page "Notes for Windows users" for details.
Type "help" for help.

postgres=# create database ana;
CREATE DATABASE
postgres=# \c ana
You are now connected to database "ana" as user "postgres".
ana=#
```

2. Create Tables

```
ana=# CREATE TABLE Doctor(    d_id VARCHAR(5),    d_name VARCHAR(50),    d_phone VARCHAR(12));
CREATE TABLE
ana=# \d
         List of relations
 Schema |  Name  | Type  |  Owner
--------+--------+-------+----------
 public | doctor | table | postgres
(1 row)


ana=#
```

```
ana=# \d Doctor
                    Table "public.doctor"
 Column  |         Type          | Collation | Nullable | Default
---------+-----------------------+-----------+----------+---------
 d_id    | character varying(5)  |           |          |
 d_name  | character varying(50) |           |          |
 d_phone | character varying(12) |           |          |
```

```
ana=# ALTER TABLE Doctor ADD PRIMARY KEY (d_id);
ALTER TABLE
ana=# \d Doctor
                    Table "public.doctor"
 Column  |         Type          | Collation | Nullable | Default
---------+-----------------------+-----------+----------+---------
 d_id    | character varying(5)  |           | not null |
 d_name  | character varying(50) |           |          |
 d_phone | character varying(12) |           |          |
Indexes:
    "doctor_pkey" PRIMARY KEY, btree (d_id)
```

```
ana=# CREATE TABLE Bed_Patient(    p_id VARCHAR(5),    B_id VARCHAR(5),    in_date date,    out_date date);ALTER TABLE B
ed_Patient ADD PRIMARY KEY (p_id);ALTER TABLE Bed_Patient ALTER COLUMN B_id SET NOT NULL;ALTER TABLE Bed_Patient ADD FOR
EIGN KEY (p_id) REFERENCES Patient (p_id);ALTER TABLE Bed_Patient ADD FOREIGN KEY (B_id) REFERENCES Bed (B_id);
CREATE TABLE
ALTER TABLE
ALTER TABLE
ALTER TABLE
ALTER TABLE
ana=# \d Patient
                    Table "public.patient"
  Column   |          Type          | Collation | Nullable | Default
-----------+------------------------+-----------+----------+---------
 p_id      | character varying(5)   |           | not null |
 p_name    | character varying(50)  |           |          |
 diagnosis | character varying(100) |           |          |
 age       | smallint               |           |          |
Indexes:
    "patient_pkey" PRIMARY KEY, btree (p_id)
Referenced by:
    TABLE "bed_patient" CONSTRAINT "bed_patient_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)
    TABLE "prescription" CONSTRAINT "prescription_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)
```

```
ana=# \d Patient
                    Table "public.patient"
  Column   |          Type          | Collation | Nullable | Default
-----------+------------------------+-----------+----------+---------
 p_id      | character varying(5)   |           | not null |
 p_name    | character varying(50)  |           |          |
 diagnosis | character varying(100) |           |          |
 age       | smallint               |           |          |
Indexes:
    "patient_pkey" PRIMARY KEY, btree (p_id)
Referenced by:
    TABLE "bed_patient" CONSTRAINT "bed_patient_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)
    TABLE "prescription" CONSTRAINT "prescription_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)


ana=# \d Medicine
                    Table "public.medicine"
  Column  |         Type          | Collation | Nullable | Default
----------+-----------------------+-----------+----------+---------
 med_id   | character varying(5)  |           | not null |
 med_name | character varying(50) |           |          |
Indexes:
    "medicine_pkey" PRIMARY KEY, btree (med_id)
Referenced by:
    TABLE "prescription" CONSTRAINT "prescription_med_id_fkey" FOREIGN KEY (med_id) REFERENCES medicine(med_id)
```

```
ana=# \d Prescription
                Table "public.prescription"
 Column |         Type          | Collation | Nullable | Default
--------+-----------------------+-----------+----------+---------
 p_id   | character varying(5) |           | not null |
 d_id   | character varying(5) |           | not null |
 med_id | character varying(5) |           |          |
Indexes:
    "prescription_pkey" PRIMARY KEY, btree (p_id)
Foreign-key constraints:
    "prescription_d_id_fkey" FOREIGN KEY (d_id) REFERENCES doctor(d_id)
    "prescription_med_id_fkey" FOREIGN KEY (med_id) REFERENCES medicine(med_id)
    "prescription_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)
```

```
ana=# \d Bed
                    Table "public.bed"
 Column  |         Type         | Collation | Nullable | Default
---------+----------------------+-----------+----------+---------
 b_id    | character varying(5) |           | not null |
 ward_no | smallint             |           |          |
Indexes:
    "bed_pkey" PRIMARY KEY, btree (b_id)
Referenced by:
    TABLE "bed_patient" CONSTRAINT "bed_patient_b_id_fkey" FOREIGN KEY (b_id) REFERENCES bed(b_id)


ana=# \d Bed_Patient
                  Table "public.bed_patient"
  Column  |         Type         | Collation | Nullable | Default
----------+----------------------+-----------+----------+---------
 p_id     | character varying(5) |           | not null |
 b_id     | character varying(5) |           | not null |
 in_date  | date                 |           |          |
 out_date | date                 |           |          |
Indexes:
    "bed_patient_pkey" PRIMARY KEY, btree (p_id)
Foreign-key constraints:
    "bed_patient_b_id_fkey" FOREIGN KEY (b_id) REFERENCES bed(b_id)
    "bed_patient_p_id_fkey" FOREIGN KEY (p_id) REFERENCES patient(p_id)
```

```
ana=# \d
            List of relations
 Schema |     Name     | Type  |  Owner
--------+--------------+-------+----------
 public | bed          | table | postgres
 public | bed_patient  | table | postgres
 public | doctor       | table | postgres
 public | medicine     | table | postgres
 public | patient      | table | postgres
 public | prescription | table | postgres
(6 rows)
```

```
ana=# INSERT INTO Doctor (d_id, d_name, d_phone) VALUES ('8', 'Darla Frossell', '946-679-8495');
INSERT 0 1
ana=#
```

3. Display Inserted Values

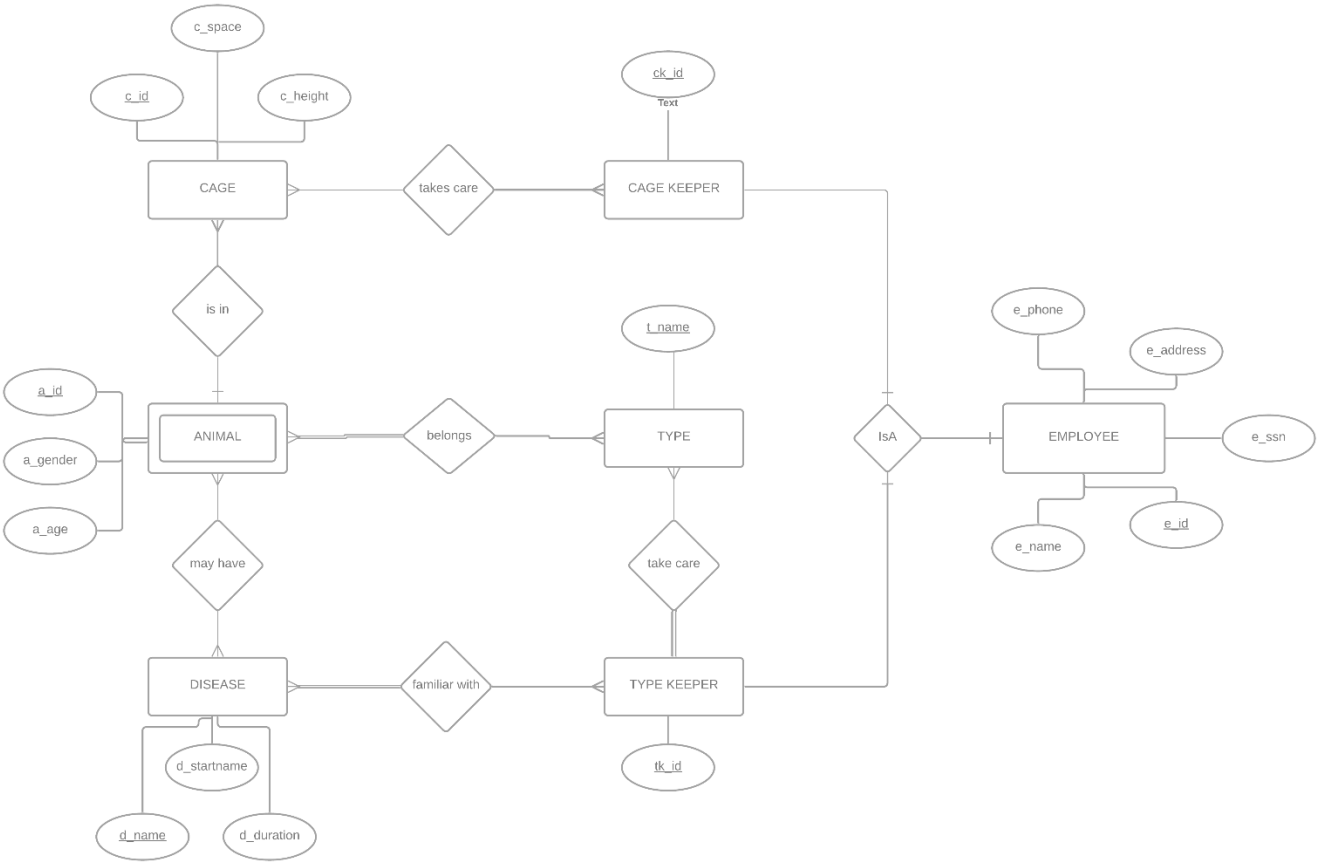
```
ana=# SELECT * FROM doctor;
 d_id  |      d_name      |   d_phone
-------+------------------+--------------
 20050 | Deeanne Hakonsen | 685-921-7455
 37436 | Lucita Vairow    | 412-269-6919
 8     | Darla Frossell   | 946-679-8495
 847   | Billie Sliney    | 951-783-4989
 35    | Harris Lowres    | 421-270-8105
(5 rows)


ana=# SELECT * FROM patient;
 p_id |      p_name       |                        diagnosis                         | age
------+-------------------+----------------------------------------------------------+-----
 179  | Dmitri Wherrit    | Eichhornia azurea (Sw.) Kunth                            |  28
 079  | Baryram Langmaid  | Aspicilia polychroma (Anzi) Nyl.                         |  42
 108  | Christina Carbine | Mitella xintermedia Bruhin ex Small & Rydb. (pro sp.)    |  16
 253  | Dean Dumbelton    | Ribes menziesii Pursh var. leptosmum (Coville) Jeps.     |  20
 2075 | Morgen Tsarovic   | Astragalus crassicarpus Nutt. var. cavus Barneby         |  35
(5 rows)
```

```
ana=# SELECT * FROM medicine;
 med_id |                med_name
--------+----------------------------------------
 3335   | ED A-HIST
 0331   | TRAMADOL HYDROCHLORIDE
 58     | YES TO TOMATOES ROLLER BALL SPOT STICK
 5364   | ThyroShield
 72     | sotalol hydrochloride
(5 rows)


ana=# SELECT * FROM bed;
 b_id  | ward_no
-------+---------
 9299  |     184
 87113 |     917
 28019 |     886
 19852 |     374
 5882  |      53
(5 rows)
```

```
ana=# SELECT * FROM prescription;
 p_id | d_id  | med_id
------+-------+--------
 179  | 37436 | 3335
 079  | 37436 | 58
 108  | 37436 | 72
 253  | 8     | 5364
(4 rows)


ana=# SELECT * FROM bed_patient;
 p_id | b_id  |  in_date   |  out_date
------+-------+------------+------------
 179  | 87113 | 2020-12-23 | 2021-09-11
 079  | 28019 | 2020-11-16 | 2021-06-10
 108  | 19852 | 2021-01-14 | 2021-03-05
 253  | 5882  | 2020-12-08 | 2021-05-14
(4 rows)
```

Task 2

ERD diagram for the given problem case study.



TASK 3

Relation table for the previous question.