DBMS LAB WEEK3

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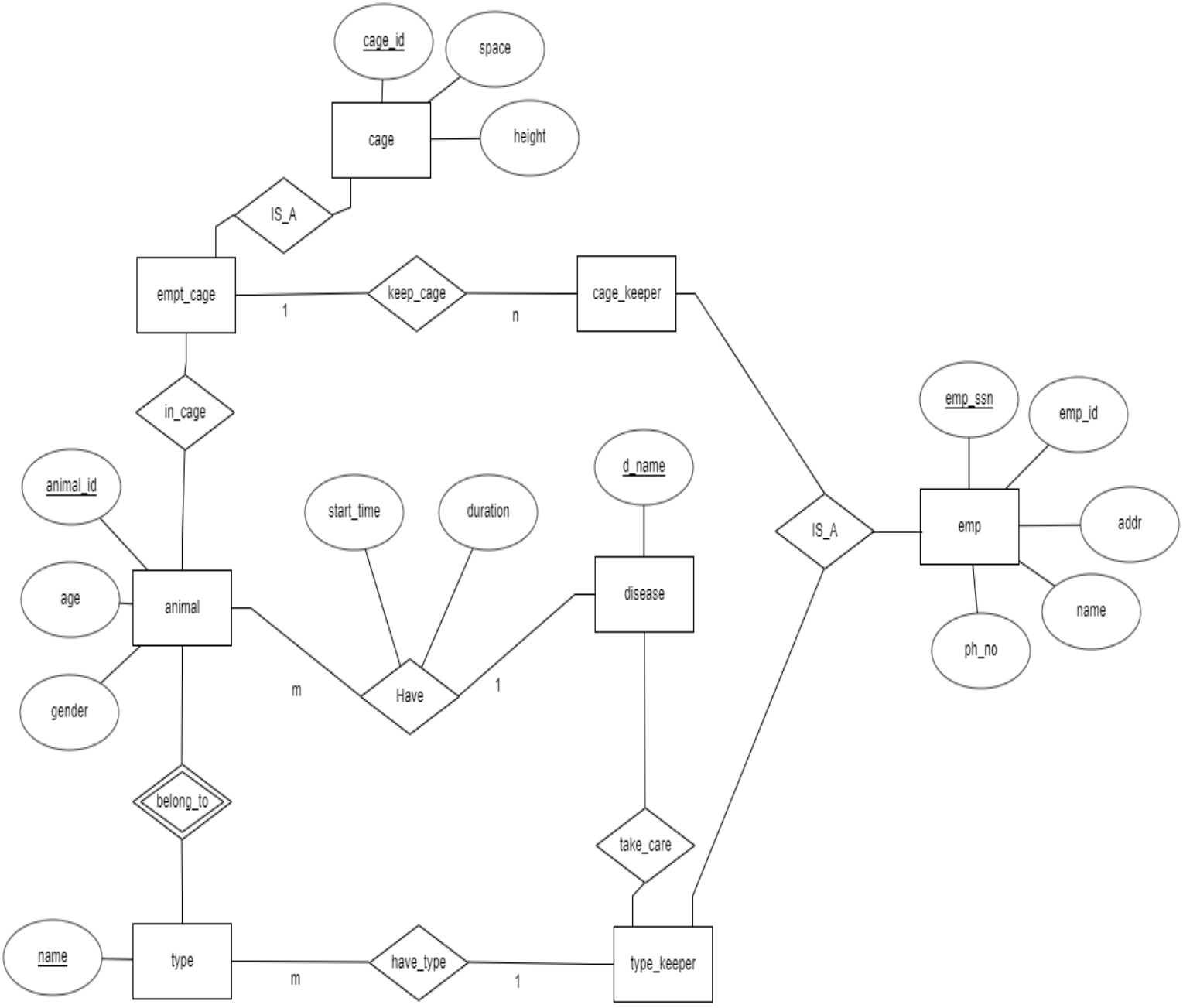
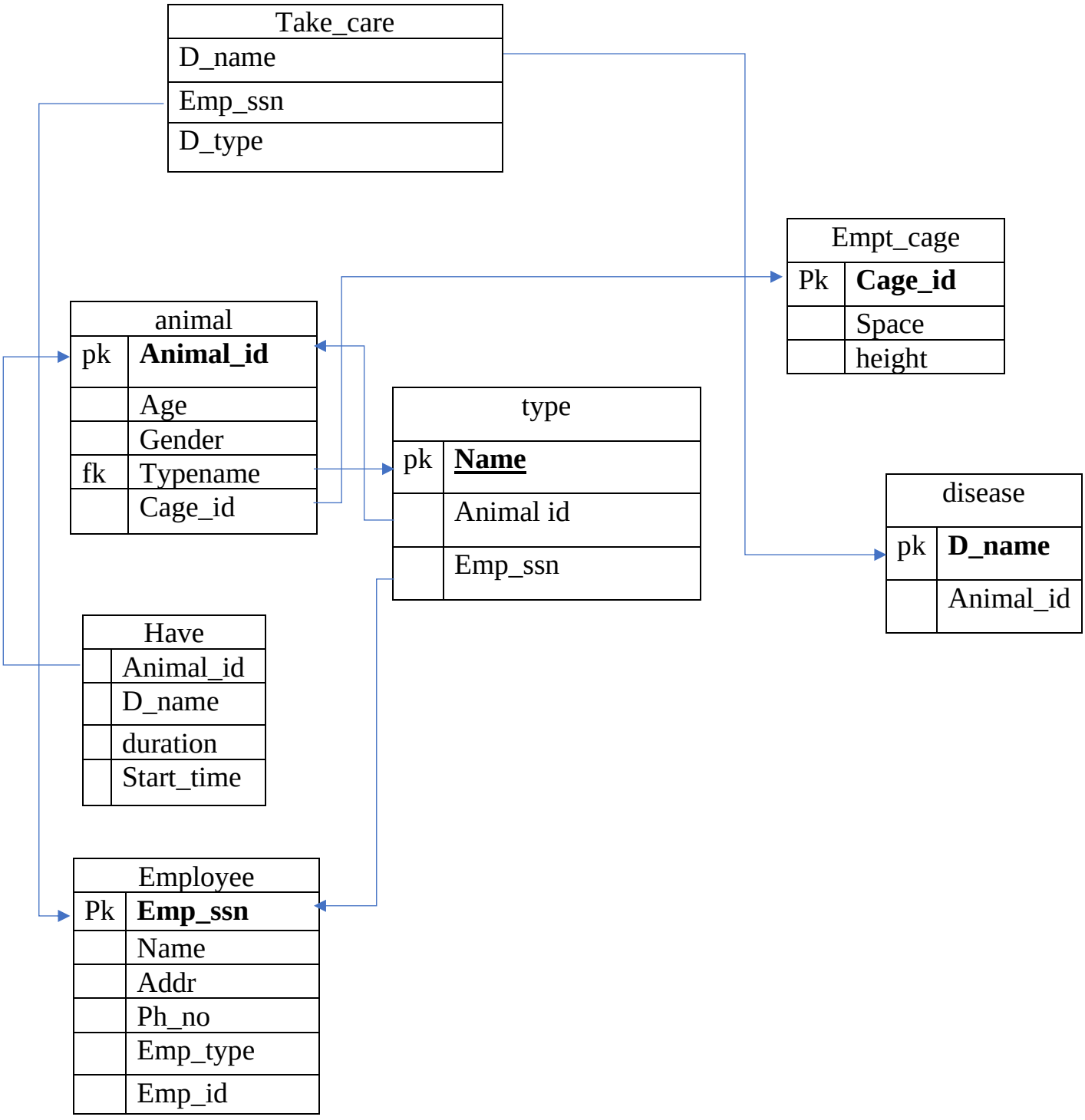
Section: D

Draw ER Diagram for the following:

The Bannerghatta Biological Zoo has many types of animals. Every type has a unique name. Every animal of the same type has a unique animal ID. Animals in two types may have the same animal ID. Animals also have age and gender. Animals may have diseases. The beginning time and the duration of a disease need to be recorded. A disease has a unique name. A type keeper takes care of only one type of animals. Every type may have many type keepers. A type keeper may or may not be familiar with diseases. But every disease must be handled by at least one type keeper. Type keepers have name, employee ID, ssn, address and phone number. All animals are in cages. Some cage may be empty. Every cage has a cage ID, space and height. A cage keeper may take care of many cages. Every non-empty cage must have at least one cage keeper. Empty cages don't need any cage keepers. Cage keepers have name, employee ID, ssn, address and phone number.



Convert the ER diagram of zoo into Relational table



Write create statements for following considering constraints appropriately

Doctor(**d_id**,d_name,d_phone)

Patient(**p_id**,p_name,diagnosis,age)

Medicine(**med_id**,med_name)

Prescription(**p_id,d_id**,med_id)

Bed(**B_id**,ward_no)

Bed_Patient(**p_id,b_id**,in_date,out_date)

```
C:\Program Files (x86)\PostgreSQL\10\bin>psql -U postgres
Password for user postgres:
psql (10.18)
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.
```

Creating Database and making connection with it:

```
postgres=# create database pro3;
CREATE DATABASE
postgres=# \c pro3
You are now connected to database "pro3" as user "postgres".
```

Creating table Doctor and inserting value in it

```
pro3=# create table Doctor (
pro3(# d_id INT primary key,
pro3(# d_name VARCHAR(20),
pro3(# d_phone INT );
CREATE TABLE
```

```
pro3=# insert into Doctor values ('801', 'Amit', '85469' );
INSERT 0 1
pro3=# insert into Doctor values ('802', 'Anil', '0651244' );
INSERT 0 1
pro3=# insert into Doctor values ('803', 'Abaaz', '651244' );
INSERT 0 1
pro3=# insert into Doctor values ('804', 'Ankur', '986542' );
INSERT 0 1
pro3=# insert into Doctor values ('805', 'Amol', '65421897' );
INSERT 0 1
pro3=#
```

Creating table Patient and inserting value in it:

```
pro3=# create table Patient (
pro3(# p_id INT primary key,
pro3(# p_name VARCHAR(30),
pro3(# diagnosis VARCHAR(40),
pro3(# age INT );
CREATE TABLE
```

```
pro3=# insert into Patient values ('101', 'kumar', 'brain scanning', '30' );
INSERT 0 1
pro3=# insert into Patient values ('102', 'suman', 'lung ventilation', '33' );
INSERT 0 1
pro3=# insert into Patient values ('103', 'mehul', 'echocardiography', '25' );
INSERT 0 1
pro3=# insert into Patient values ('104', 'sital', 'perfusion scan', '40' );
INSERT 0 1
pro3=# insert into Patient values ('105', 'sameer', 'angiocardiography', '45' );
INSERT 0 1
pro3=#
```

Creating table Medicine and inserting value in it:

```
pro3=# create table Medicine (
pro3(# med_id INT primary key,
pro3(# med_name VARCHAR(20));
CREATE TABLE
```

```
pro3=# insert into Medicine values ('1112', 'Allopurinol' );
INSERT 0 1
pro3=# insert into Medicine values ('1546', 'Etoposide' );
INSERT 0 1
pro3=# insert into Medicine values ('6542', 'G-CSF' );
INSERT 0 1
pro3=# insert into Medicine values ('9854', 'Hydralazine' );
INSERT 0 1
pro3=# insert into Medicine values ('1111', 'soframicine' );
INSERT 0 1
pro3=#
```

Creating table Prescription and inserting value in it:

```
pro3=# create table Prescription (
pro3(# p_id INT,
pro3(# d_id INT,
pro3(# med_id INT,
pro3(# primary key (p_id, d_id) );
CREATE TABLE
```

```
pro3=# insert into Prescription values ('101', '801','1112' );
INSERT 0 1
pro3=# insert into Prescription values ('102', '802','1546' );
INSERT 0 1
pro3=# insert into Prescription values ('103', '803', '6542' );
INSERT 0 1
pro3=# insert into Prescription values ('104', '804', '9854' );
INSERT 0 1
pro3=# insert into Prescription values ('105', '805', '1111' );
INSERT 0 1
```

Creating table Bed and inserting value in it:

```
pro3=# create table Bed (
pro3(# B_id INT primary key,
pro3(# ward_no INT );
CREATE TABLE
```

```
pro3=# insert into Bed values ('01', '21' );
INSERT 0 1
pro3=# insert into Bed values ('02', '22' );
INSERT 0 1
pro3=# insert into Bed values ('03', '23' );
INSERT 0 1
pro3=# insert into Bed values ('04', '24' );
INSERT 0 1
pro3=# insert into Bed values ('05', '25' );
INSERT 0 1
```

Creating table Bed_Patient and inserting value in it:

```
pro3=# create table Bed_Patient (
pro3(# p_id INT,
pro3(# b_id INT,
pro3(# in_date DATE,
pro3(# out_date DATE,
pro3(# primary key (p_id, b_id) );
CREATE TABLE
pro3=#
```

```
pro3=# insert into Bed_Patient values ('101', '01', '2006-08-21', '2006-09-12' );
INSERT 0 1
pro3=# insert into Bed_Patient values ('102', '02', '2011-09-21', '2012-09-15' );
INSERT 0 1
pro3=# insert into Bed_Patient values ('103', '03', '2011-09-21', '2016-09-15' );
INSERT 0 1
pro3=# insert into Bed_Patient values ('104', '04', '2011-02-11', '2019-09-22' );
INSERT 0 1
pro3=# insert into Bed_Patient values ('105', '05', '2018-06-30', '2020-12-01' );
INSERT 0 1
pro3=#
```

```
pro3=# SELECT * FROM doctor;
 d_id | d_name | d_phone
------+--------+----------
  801 | Amit   |    85469
  802 | Anil   |   651244
  803 | Abaaz  |   651244
  804 | Ankur  |   986542
  805 | Amol   | 65421897
(5 rows)
```

```
pro3=# SELECT * FROM patient;
 p_id | p_name |     diagnosis     | age
------+--------+-------------------+-----
  101 | kumar  | brain scanning    |  30
  102 | suman  | lung ventilation  |  33
  103 | mehul  | echocardiography  |  25
  104 | sital  | perfusion scan    |  40
  105 | sameer | angiocardiography |  45
(5 rows)
```

```
pro3=# SELECT * FROM medicine;
 med_id |  med_name
--------+-------------
   1112 | Allopurinol
   1546 | Etoposide
   6542 | G-CSF
   9854 | Hydralazine
   1111 | soframicine
(5 rows)
```

```
pro3=# SELECT * FROM prescription;
 p_id | d_id | med_id
------+------+--------
  101 |  801 |   1112
  102 |  802 |   1546
  103 |  803 |   6542
  104 |  804 |   9854
  105 |  805 |   1111
(5 rows)
```

```
pro3=# SELECT * FROM bed;
 b_id | ward_no
------+---------
    1 |      21
    2 |      22
    3 |      23
    4 |      24
    5 |      25
(5 rows)
```

```
pro3=# SELECT * FROM bed_patient;
 p_id | b_id |  in_date   |  out_date
------+------+------------+------------
  101 |    1 | 2006-08-21 | 2006-09-12
  102 |    2 | 2011-09-21 | 2012-09-15
  103 |    3 | 2011-09-21 | 2016-09-15
  104 |    4 | 2011-02-11 | 2019-09-22
  105 |    5 | 2018-06-30 | 2020-12-01
(5 rows)

pro3=#
```