**-- GamePair (games, year, gimmick, played\_on) no foreign key**

create table game\_pair (

games varchar(35) not null primary key,

year int not null,

gimmick varchar(15),

played\_on varchar(15) not null

);

**-- Pokedex (region\_name, games) games is foreign key**

create table pokedex (

region\_name varchar(7) not null primary key,

games varchar(35) not null,

foreign key (games) references game\_pair(games) on update cascade on delete cascade

);

**-- Pokemon (national\_number, name, type1, type2) no foreign key**

create table pokemon (

national\_number int not null primary key,

name varchar(15) not null,

type1 varchar(8) not null,

type2 varchar(8)

);

**-- Record (region\_name, national\_number, pokedex\_number, name) this is a linking entity between Pokédex and Pokémon, region\_name, national\_number, and name are foreign keys**

create table record (

region\_name varchar(7) not null,

national\_number int not null,

pokedex\_number int not null,

name varchar(15) not null,

primary key (region\_name, national\_number),

foreign key (region\_name) references pokedex(region\_name) on update cascade on delete cascade,

foreign key (naitonal\_number) references pokemon(national\_number) on update cascade on delete cascade

);

**-- Poke Ball (ball\_name, ball\_description) games is foreign key**

create table pokeball (

ball\_name varchar(15) not null primary key,

ball\_description varchar(170) not null

);

**-- List (year, ball\_name, games) year, ball\_name, and games are foreign keys**

create table list (

games varchar (35) not null,

ball\_name varchar(15) not null,

primary key (games, ball\_name),

foreign key (games) references game\_pair(games) on update cascade on delete cascade,

foreign key (ball\_name) references pokeball(ball\_name) on update cascade on delete cascade

);

**-- Sandwich (sandwich\_name, games, ingredients, effects) game\_name is foreign key**

create table sandwich (

sandwich\_name varchar(35) not null primary key,

games varchar(20) not null,

ingredients varchar(120) not null,

effects varchar(100) not null,

foreign key (games) references game\_pair(games) on update cascade on delete cascade

);

-- Query 1- inner join

-- Find all the games (games) that have Safari Ball.

select distinct g.games

from game\_pair g

inner join list l

on g.games = l.games

inner join pokeball b

on b.ball\_name = l.ball\_name and b.ball\_name like 'Safari Ball';

-- Query 2- sum, count, avg, etc.

-- Find the number of Pokémon who have dual typing.

select count(national\_number)

from pokemon

where type2 is not null;

-- Query 3- subquery

-- Find the Pokemon (national\_number and name) that has the smallest national number in the Paldea region.

select name, national\_number

from record

where region\_name = 'Paldea'

and national\_number = (select min(national\_number) from record where region\_name = 'Paldea');

-- Query 4- group by and having

-- Find the primary types that have more than 50 Pokemon with that primary type.

select type1, count(national\_number)

from pokemon

group by type1

having count(national\_number) > 50;

-- Query 5- left outer or right outer join

-- List the Pokemon (national\_number and name) in the games and how many regions they’re in.

select p.national\_number, p.name, count(r.region\_name) as regions

from pokedex d

left outer join record r

on d.region\_name = r.region\_name

left outer join pokemon p

on p.national\_number = r.national\_number

group by p.national\_number;