



PRÁCTICA 3-1

Realizado por: Jesús Padilla Crespo

UBICACIÓN	
ID Ubicación	VARCHAR (3)
Nombre Ubicación	VARCHAR (30)
ID Gimnasio	INTEGER
Tiene Legendario	TINYINT (1)
Población	INTEGER (10)

[N:M]

[1:N]

[N:1]

[1:1]

[1:N]

GIMNASIO	
ID Gimnasio	VARCHAR (10)
Nombre Líder	VARCHAR (50)
Tipo Gimnasio	VARCHAR (30)
Nombre Medalla	VARCHAR (40)
ID Ubicación	VARCHAR (3)
ID MO	INT

MOs	
ID MO	INTEGER
Nombre MO	VARCHAR (30)
ID Ubicación	VARCHAR (3)
Objetivo	VARCHAR (20)

POKEMON	
NºPokedex	INTEGER (3)
Nombre	VARCHAR (20)
Tipo 1	VARCHAR (20)
Tipo 2	VARCHAR (20)
Evolución	TINYINT (1)
ID Ubicación	VARCHAR (3)
ID Pokeball Recomendada	VARCHAR (2)

POKEBALL	
ID Pokeball	VARCHAR (2)
Nombre Pokeball	VARCHAR (30)
Precio	INT (6)
Porcentaje de Captura	INT (3)

1. Plantea un enunciado (piensa en como mínimo el proyecto debe contener 3 tablas)

ENUNCIADO-Queremos crear una base de datos sobre el videojuego Pokémon 1 Generación.

En la base de datos debe constar las ubicaciones del juego, de las cuales nos interesa saber su ID, nombre, Si tiene gimnasio el ID del gimnasio, si la ubicación tiene un evento legendario y la población. El segundo aspecto del juego que nos interesa almacenar son los Pokémon, de los cuales queremos saber su N.º de Pokedex, su nombre, su 1 tipo, y si tiene segundo también queremos almacenarlo, si tienen o no evolución, su ID de Ubicación donde poder capturarlos y el ID de pokeball que recomiendan para capturar dicho Pokémon.

Respecto a las pokeball, queremos almacenar su ID, su nombre, precio y Porcentaje de captura.

En los gimnasios queremos almacenar el ID, los nombres de los líderes de cada gimnasio, el tipo de gimnasio, la medalla y si tienen evento de MO y su ID de ubicación en la que se encuentran. Por último queremos almacenar los datos de la MO, tales como su ID, su nombre, Objetivo y el ID donde se puede obtener.

Además tenemos información adicional respecto a ciertos datos de la base.

Conocemos que en todas las ubicaciones hay varios Pokémon y varios Pokémon en todas las ubicaciones. Sólo algunas ubicaciones tienen gimnasio y solo hay un gimnasio por ubicación. En los gimnasios algunos entregan MO pero no todos, y sólo se entrega una MO por gimnasio con permiso de entrega.

Respecto los Pokémon, sólo se pueden capturar por una Pokeball pero se pueden utilizar varias pokeball por Pokémon (depende de si se ha capturado o no).

2. Obtener el modelo ER.

3. A partir del Modelo ER obtener el modelo Relacional.

Utilizaré Modelo Relacional con Propagación:

GIMNASIO(ID_Gimnasio, Nombre_Líder, Tipo_Gimnasio, ID_Ubicación, ID_MO)

UBICACIÓN(ID_Ubicación, Nombre_Ubicación, Tiene_Gimnasio, Población, ID_Gimnasio)

MOs(ID_MO, Nombre_MO, Objetivo, ID_Ubicación)

POKEMON(Nº Pokedex, Nombre, Tipo1, Tipo2, Evolución, ID_Ubicación, ID_Pokeball)

POKEBALL(ID_Pokeball, Nombre_Pokeball, Precio, Porcentaje_Captura)

4. Crea en Mysql todas las tablas (La parte de DDL)

5. Inserta un mínimo de 5 filas por tabla.

6. Consultas:

- Crea 10 búsquedas sencillas usando IN, BETWEEN, ...
- Crea 5 búsquedas con Subselect
- Crea 5 búsquedas con Join
- Haz 5 Actualizaciones de las tablas con condiciones.

e. Borra alguna fila

7. Uso de Funciones. Aplica 5 funciones de las vistas en clase en algún ejemplo.

```
Create database practica31;

use practica31;
CREATE TABLE POKEMON (
  N_POKEDEX int(3) NOT NULL,
  NOMBRE varchar(20) NOT NULL,
  TIPO1 varchar(20) NOT NULL,
  TIPO2 varchar(20),
  EVOLUCION ENUM("SI","NO") DEFAULT "NO" NOT NULL,
  ID_UBICACION VARCHAR(3) NOT NULL,
  ID_POKEBALL VARCHAR (2) NOT NULL,
  PRIMARY KEY (N_POKEDEX)
);

INSERT INTO POKEMON
VALUES(1,"Bulbasaur","PLANTA","VENENO","SI","PBS","PB");
INSERT INTO POKEMON
VALUES(2,"Ivysaur","PLANTA","VENENO","SI","PBS","SB");
INSERT INTO POKEMON
VALUES(3,"Venusaur","PLANTA","VENENO","NO","ISP","UB");
INSERT INTO POKEMON VALUES(4,"Charmander","FUEGO",NULL,"SI","CDV","PB");
INSERT INTO POKEMON VALUES(5,"Charmeleon","FUEGO",NULL,"NO","CDK","SB");
INSERT INTO POKEMON
VALUES(6,"Charizard","FUEGO","VOLADOR","NO","CDV","UB");
INSERT INTO POKEMON VALUES(7,"Squirtle","AGUA",NULL,"SI","PBL","PB");
INSERT INTO POKEMON VALUES(8,"Wartortle","AGUA",NULL,"NO","CDP","SB");
INSERT INTO POKEMON VALUES(9,"Blastoise","AGUA",NULL,"NO","ISP","UB");
INSERT INTO POKEMON VALUES(10,"Caterpie","BICHO",NULL,"SI","CDP","PB");
INSERT INTO POKEMON VALUES(11,"Metapod","BICHO",NULL,"SI","CDK","SB");
INSERT INTO POKEMON
VALUES(12,"Butterfree","BICHO","VOLADOR","NO","CDP","UB");
INSERT INTO POKEMON VALUES(13,"Weedle","BICHO","VENENO
","SI","CDF","PB");
INSERT INTO POKEMON VALUES(14,"Kakuna","BICHO","VENENO
","SI","ISC","SB");
INSERT INTO POKEMON VALUES(15,"Beedrill","BICHO","VENENO
","NO","ISC","UB");
INSERT INTO POKEMON
VALUES(16,"Pidgey","NORMAL","VOLADOR","SI","CDP","PB");
INSERT INTO POKEMON
VALUES(17,"Pidgeotto","NORMAL","VOLADOR","SI","PBL","SB");
```

```

INSERT INTO POKEMON
VALUES(18,"Pidgeot","NORMAL","VOLADOR","NO","CDP","UB");
INSERT INTO POKEMON VALUES(19,"Rattata","NORMAL",NULL,"SI","CDK","PB");
INSERT INTO POKEMON VALUES(20,"Raticate","NORMAL",NULL,"NO","ISC","SB");
INSERT INTO POKEMON
VALUES(21,"Spearow","NORMAL","VOLADOR","SI","ISP","PB");
INSERT INTO POKEMON
VALUES(22,"Fearow","NORMAL","VOLADOR","NO","ISC","SB");
INSERT INTO POKEMON VALUES(23,"Ekans","VENENO ",NULL,"SI","CDA","PB");
INSERT INTO POKEMON VALUES(24,"Arbok","VENENO ",NULL,"NO","CDC","SB");
INSERT INTO POKEMON
VALUES(25,"Pikachu","ELECTRICO",NULL,"SI","CDF","PB");
INSERT INTO POKEMON VALUES(26,"Raichu","ELECTRICO",NULL,"NO","PBS","SB");
INSERT INTO POKEMON VALUES(27,"Sandshrew","TIERRA",NULL,"SI","ISF","PB");
INSERT INTO POKEMON VALUES(28,"Sandslash","TIERRA",NULL,"NO","CDF","SB");
INSERT INTO POKEMON VALUES(29,"Nidoran♀","VENENO ",NULL,"SI","ISC","PB");
INSERT INTO POKEMON VALUES(30,"Nidorina","VENENO ",NULL,"SI","CDC","SB");
INSERT INTO POKEMON VALUES(31,"Nidoqueen","VENENO
","TIERRA","NO","CDP","UB");
INSERT INTO POKEMON VALUES(32,"Nidoran♂","VENENO ",NULL,"SI","ISF","PB");
INSERT INTO POKEMON VALUES(33,"Nidorino","VENENO ",NULL,"SI","ISP","SB");
INSERT INTO POKEMON VALUES(34,"Nidoking","VENENO
","TIERRA","NO","CDA","UB");
INSERT INTO POKEMON VALUES(35,"Clefairy","HADA",NULL,"SI","CDK","PB");
INSERT INTO POKEMON VALUES(36,"Clefable","HADA",NULL,"NO","PBP","SB");
INSERT INTO POKEMON VALUES(37,"Vulpix","FUEGO",NULL,"SI","ISF","PB");
INSERT INTO POKEMON VALUES(38,"Ninetales","FUEGO",NULL,"NO","PBP","SB");
INSERT INTO POKEMON
VALUES(39,"Jigglypuff","NORMAL",NULL,"SI","PBP","PB");
INSERT INTO POKEMON
VALUES(40,"Wigglytuff","NORMAL",NULL,"NO","ISC","SB");
INSERT INTO POKEMON VALUES(41,"Zubat","VENENO
","VOLADOR","SI","CDA","PB");
INSERT INTO POKEMON VALUES(42,"Golbat","VENENO
","VOLADOR","NO","ISF","SB");
INSERT INTO POKEMON VALUES(43,"Oddish","PLANTA","VENENO
","SI","PBP","PB");
INSERT INTO POKEMON VALUES(44,"Gloom","PLANTA","VENENO
","SI","CDF","SB");
INSERT INTO POKEMON VALUES(45,"Vileplume","PLANTA","VENENO
","SI","CDK","UB");
INSERT INTO POKEMON VALUES(46,"Paras","BICHO","PLANTA","NO","PBL","PB");
INSERT INTO POKEMON
VALUES(47,"Parasect","BICHO","PLANTA","NO","ISC","SB");
INSERT INTO POKEMON VALUES(48,"Venonat","BICHO","VENENO
","SI","ISF","PB");
INSERT INTO POKEMON VALUES(49,"Venomoth","BICHO","VENENO
","NO","PBS","SB");
INSERT INTO POKEMON VALUES(50,"Diglett","TIERRA",NULL,"SI","CDA","PB");

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INSERT INTO POKEMON VALUES(51,"Dugtrio","TIERRA",NULL,"NO","CDK","SB");
INSERT INTO POKEMON VALUES(52,"Meowth","NORMAL",NULL,"SI","PBL","PB");
INSERT INTO POKEMON VALUES(53,"Persian","NORMAL",NULL,"NO","CDV","SB");
INSERT INTO POKEMON VALUES(54,"Psyduck","AGUA",NULL,"SI","CDA","PB");
INSERT INTO POKEMON VALUES(55,"Golduck","AGUA",NULL,"NO","PBS","SB");
INSERT INTO POKEMON VALUES(56,"Mankey","LUCHA",NULL,"SI","CDV","PB");
INSERT INTO POKEMON VALUES(57,"Primeape","LUCHA",NULL,"NO","CDA","SB");
INSERT INTO POKEMON VALUES(58,"Growlithe","FUEGO",NULL,"SI","CDC","PB");
INSERT INTO POKEMON VALUES(59,"Arcanine","FUEGO",NULL,"NO","PBL","SB");
INSERT INTO POKEMON VALUES(60,"Poliwag","AGUA",NULL,"SI","PBP","PB");
INSERT INTO POKEMON VALUES(61,"Poliwhirl","AGUA",NULL,"SI","PBL","SB");
INSERT INTO POKEMON
VALUES(62,"Poliwrath","AGUA","LUCHA","NO","ISF","UB");
INSERT INTO POKEMON VALUES(63,"Abra","PSIQUICO",NULL,"SI","CDP","PB");
INSERT INTO POKEMON VALUES(64,"Kadabra","PSIQUICO",NULL,"SI","CDV","SB");
INSERT INTO POKEMON
VALUES(65,"Alakazam","PSIQUICO",NULL,"NO","CDV","UB");
INSERT INTO POKEMON VALUES(66,"Machop","LUCHA",NULL,"SI","CDF","PB");
INSERT INTO POKEMON VALUES(67,"Machoke","LUCHA",NULL,"SI","CDC","SB");
INSERT INTO POKEMON VALUES(68,"Machamp","LUCHA",NULL,"NO","PBS","UB");
INSERT INTO POKEMON VALUES(69,"Bellspout","PLANTA","VENENO
","SI","CDP","PB");
INSERT INTO POKEMON VALUES(70,"Weepinbell","PLANTA","VENENO
","SI","CDK","SB");
INSERT INTO POKEMON VALUES(71,"Victreebel","PLANTA","VENENO
","NO","ISC","UB");
INSERT INTO POKEMON VALUES(72,"Tentacool","AGUA","VENENO
","SI","CDP","PB");
INSERT INTO POKEMON VALUES(73,"Tentacruel","AGUA","VENENO
","NO","ISC","SB");
INSERT INTO POKEMON VALUES(74,"Geodude","ROCA","TIERRA","SI","CDF","PB");
INSERT INTO POKEMON
VALUES(75,"Graveler","ROCA","TIERRA","NO","CDK","SB");
INSERT INTO POKEMON VALUES(76,"Golem","ROCA","TIERRA","NO","CDK","UB");
INSERT INTO POKEMON VALUES(77,"Ponyta","FUEGO",NULL,"SI","CDF","PB");
INSERT INTO POKEMON VALUES(78,"Rapidash","FUEGO",NULL,"NO","CDC","SB");
INSERT INTO POKEMON
VALUES(79,"Slowpoke","AGUA","PSIQUICO","SI","CDA","PB");
INSERT INTO POKEMON
VALUES(80,"Slowbro","AGUA","PSIQUICO","NO","CDV","SB");
INSERT INTO POKEMON
VALUES(81,"Magnumite","ELECTRICO","ACERO","SI","CDK","PB");
INSERT INTO POKEMON
VALUES(82,"Magnetron","ELECTRICO","ACERO","NO","ISC","SB");
INSERT INTO POKEMON
VALUES(83,"Farfetch'd","NORMAL","VOLADOR","NO","PBS","PB");
INSERT INTO POKEMON
VALUES(84,"Doduo","NORMAL","VOLADOR","SI","CDA","PB");

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INSERT INTO POKEMON
VALUES(85,"Dodrio","NORMAL","VOLADOR","NO","CDV","PB");
INSERT INTO POKEMON VALUES(86,"Seel","AGUA",NULL,"SI","ISF","GB");
INSERT INTO POKEMON VALUES(87,"Dewgong","AGUA","HIELO","NO","PBP","PB");
INSERT INTO POKEMON VALUES(88,"Grimer","VENENO ",NULL,"SI","PBL","GB");
INSERT INTO POKEMON VALUES(89,"Muk","VENENO ",NULL,"NO","ISP","PB");
INSERT INTO POKEMON VALUES(90,"Shellder","AGUA",NULL,"SI","ISP","GB");
INSERT INTO POKEMON VALUES(91,"Cloyster","AGUA","HIELO","NO","ISF","GB");
INSERT INTO POKEMON VALUES(92,"Gastly","FANTASMA","VENENO
","SI","ISP","PB");
INSERT INTO POKEMON VALUES(93,"Haunter","FANTASMA","VENENO
","SI","CDV","SB");
INSERT INTO POKEMON VALUES(94,"Gengar","FANTASMA","VENENO
","NO","CDA","UB");
INSERT INTO POKEMON VALUES(95,"Onix","ROCA","TIERRA","NO","CDC","UB");
INSERT INTO POKEMON VALUES(96,"Drowzee","PSIQUICO",NULL,"SI","CDA","PB");
INSERT INTO POKEMON VALUES(97,"Hypno","PSIQUICO",NULL,"NO","PBS","SB");
INSERT INTO POKEMON VALUES(98,"Krabby","AGUA",NULL,"SI","PBS","PB");
INSERT INTO POKEMON VALUES(99,"Kingler","AGUA",NULL,"NO","ISF","SB");
INSERT INTO POKEMON
VALUES(100,"Voltorb","ELECTRICO",NULL,"SI","CDF","SB");
INSERT INTO POKEMON
VALUES(101,"Electrode","ELECTRICO",NULL,"NO","ISP","PB");
INSERT INTO POKEMON
VALUES(102,"Exeggcute","PLANTA","PSIQUICO","SI","CDC","SB");
INSERT INTO POKEMON
VALUES(103,"Exeggutor","PLANTA","PSIQUICO","NO","ISP","PB");
INSERT INTO POKEMON VALUES(104,"Cubone","TIERRA",NULL,"SI","CDF","SB");
INSERT INTO POKEMON VALUES(105,"Marowak","TIERRA",NULL,"NO","CDV","SB");
INSERT INTO POKEMON VALUES(106,"Hitmonlee","LUCHA",NULL,"NO","PBP","UB");
INSERT INTO POKEMON
VALUES(107,"Hitmonchan","LUCHA",NULL,"NO","PBS","UB");
INSERT INTO POKEMON
VALUES(108,"Lickitung","NORMAL",NULL,"NO","ISC","SB");
INSERT INTO POKEMON VALUES(109,"Koffing","VENENO ",NULL,"SI","ISP","PB");
INSERT INTO POKEMON VALUES(110,"Weezing","VENENO ",NULL,"NO","PBL","PB");
INSERT INTO POKEMON
VALUES(111,"Rhyhorn","TIERRA","ROCA","SI","CDC","SB");
INSERT INTO POKEMON VALUES(112,"Rhydon","TIERRA","ROCA","NO","ISP","PB");
INSERT INTO POKEMON VALUES(113,"Chansey","NORMAL",NULL,"NO","CDV","PB");
INSERT INTO POKEMON VALUES(114,"Tangela","PLANTA",NULL,"NO","PBL","PB");
INSERT INTO POKEMON
VALUES(115,"Kangaskhan","NORMAL",NULL,"NO","ISP","SB");
INSERT INTO POKEMON VALUES(116,"Horsea","AGUA",NULL,"SI","CDA","SB");
INSERT INTO POKEMON VALUES(117,"Seadra","AGUA",NULL,"NO","PBL","PB");
INSERT INTO POKEMON VALUES(118,"Goldeen","AGUA",NULL,"SI","CDC","PB");
INSERT INTO POKEMON VALUES(119,"Seaking","AGUA",NULL,"NO","PBP","SB");
INSERT INTO POKEMON VALUES(120,"Staryu","AGUA",NULL,"SI","PBL","PB");
INSERT INTO POKEMON VALUES(121,"Starmie","AGUA",NULL,"NO","ISF","PB");

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INSERT INTO POKEMON VALUES(122,"Mr.
Mime","PSIQUICO","HADA","NO","CDC","PB");
INSERT INTO POKEMON VALUES(123,"Scyther","BICHO",NULL,"NO","ISP","SB");
INSERT INTO POKEMON
VALUES(124,"Jynx","HIELO","PSIQUICO","NO","PBP","PB");
INSERT INTO POKEMON
VALUES(125,"Electabuzz","ELECTRICO",NULL,"NO","PBP","SB");
INSERT INTO POKEMON VALUES(126,"Magmar","FUEGO",NULL,"NO","CDA","SB");
INSERT INTO POKEMON VALUES(127,"Pinsir","BICHO",NULL,"NO","CDK","PB");
INSERT INTO POKEMON VALUES(128,"Tauros","NORMAL",NULL,"NO","PBL","PB");
INSERT INTO POKEMON VALUES(129,"Magikarp","AGUA",NULL,"SI","CDC","PB");
INSERT INTO POKEMON
VALUES(130,"Gyarados","AGUA","VOLADOR","NO","PBS","UB");
INSERT INTO POKEMON VALUES(131,"Lapras","AGUA","HIELO","NO","CDF","UB");
INSERT INTO POKEMON VALUES(132,"Ditto","NORMAL",NULL,"NO","CDP","PB");
INSERT INTO POKEMON VALUES(133,"Eevee","NORMAL",NULL,"SI","ISF","UB");
INSERT INTO POKEMON VALUES(134,"Vaporeon","AGUA",NULL,"NO","PBS","SB");
INSERT INTO POKEMON
VALUES(135,"Jolteon","ELECTRICO",NULL,"NO","CDF","SB");
INSERT INTO POKEMON VALUES(136,"Flareon","FUEGO",NULL,"NO","PBP","UB");
INSERT INTO POKEMON VALUES(137,"Porygon","NORMAL",NULL,"NO","CDA","SB");
INSERT INTO POKEMON VALUES(138,"Omanyte","ROCA","AGUA","SI","ISF","PB");
INSERT INTO POKEMON VALUES(139,"Omastar","ROCA","AGUA","NO","PBS","PB");
INSERT INTO POKEMON VALUES(140,"Kabuto","ROCA","AGUA","NO","CDP","PB");
INSERT INTO POKEMON VALUES(141,"Kabutops","ROCA","AGUA","NO","CDK","UB");
INSERT INTO POKEMON
VALUES(142,"Aerodactyl","ROCA","VOLADOR","NO","CDV","UB");
INSERT INTO POKEMON VALUES(143,"Snorlax","NORMAL",NULL,"NO","ISF","UB");
INSERT INTO POKEMON
VALUES(144,"Articuno","HIELO","VOLADOR","NO","ISC","MB");
INSERT INTO POKEMON
VALUES(145,"Zapdos","ELECTRICO","VOLADOR","NO","ISP","MB");
INSERT INTO POKEMON
VALUES(146,"Moltres","FUEGO","VOLADOR","NO","ISF","MB");
INSERT INTO POKEMON VALUES(147,"Dratini","DRAGÓN",NULL,"SI","PBL","PB");
INSERT INTO POKEMON
VALUES(148,"Dragonair","DRAGÓN",NULL,"SI","CDP","SB");
INSERT INTO POKEMON
VALUES(149,"Dragonite","DRAGÓN","VOLADOR","NO","ISC","UB");
INSERT INTO POKEMON VALUES(150,"Mewtwo","PSIQUICO",NULL,"NO","CDC","MB");
INSERT INTO POKEMON VALUES(151,"Mew","PSIQUICO",NULL,"NO","CDF","MB");

-----
CREATE TABLE POKEBALL (
  ID_POKEBALL VARCHAR (2)NOT NULL,
  NOMBRE_POKEBALL varchar(30) NOT NULL,
  CAPTURA_PORCENTAJE int(3) NOT NULL,
  PRECIO INT(10) NOT NULL,
  PRIMARY KEY (ID_POKEBALL)

```



```

);

INSERT INTO POKEBALL VALUES("PB","POKEBALL",42,100);
INSERT INTO POKEBALL VALUES("SB","SUPERBALL",57,200);
INSERT INTO POKEBALL VALUES("UB","ULTRABALL",73,3000);
INSERT INTO POKEBALL VALUES("MB","MASTERBALL",100,1000000);

-----

CREATE TABLE MOS (
  ID_MO INT(2)NOT NULL AUTO_INCREMENT,
  NOMBRE_MO varchar(30) NOT NULL,
  ID_UBICACION VARCHAR(3) NOT NULL,
  OBJETIVO VARCHAR(10) NOT NULL,
  PRIMARY KEY (ID_MO)
);

INSERT INTO MOS (NOMBRE_MO,ID_UBICACION,OBJETIVO)
VALUES("CORTE","CDK","ARBOL");
INSERT INTO MOS (NOMBRE_MO,ID_UBICACION,OBJETIVO)
VALUES("VUELO","PBL","AIRE");
INSERT INTO MOS (NOMBRE_MO,ID_UBICACION,OBJETIVO)
VALUES("SURF","ISF","LAGO");
INSERT INTO MOS (NOMBRE_MO,ID_UBICACION,OBJETIVO)
VALUES("FUERZA","CDF","CAJA");
INSERT INTO MOS (NOMBRE_MO,ID_UBICACION,OBJETIVO)
VALUES("ROMPE_ROCAS","PBP","ROCA");

-----

CREATE TABLE UBICACION (
  ID_UBICACION VARCHAR (3)NOT NULL,
  NOMBRE_UBICACION varchar(30) NOT NULL,
  ID_GIMNASIO VARCHAR(10),
  TIENE_LEGENDARIO ENUM("SI","NO") DEFAULT "NO" NOT NULL,
  POBLACION INT(10) NOT NULL,
  PRIMARY KEY (ID_UBICACION)
);

INSERT INTO UBICACION VALUES("PBP","Pueblo Paleta","NPC2","NO",1520);
INSERT INTO UBICACION VALUES("CDV","Ciudad Verde",NULL,"NO",65841);
INSERT INTO UBICACION VALUES("CDP","Ciudad Plateada","NPC3","NO",147992);
INSERT INTO UBICACION VALUES("CDC","Ciudad Celeste",NULL,"SI",26328);
INSERT INTO UBICACION VALUES("CDK","Ciudad Carmín","NPC1","NO",25476);
INSERT INTO UBICACION VALUES("PBL","Pueblo Lavanda","NPC4","NO",856);
INSERT INTO UBICACION VALUES("CDA","Ciudad Azafrán",NULL,"NO",73223);
INSERT INTO UBICACION VALUES("CDF","Ciudad Fucsia","NPC5","SI",253689);
INSERT INTO UBICACION VALUES("ISC","Isla Canela","NPC6","SI",562);
INSERT INTO UBICACION VALUES("PBS","Pueblo Sésamo",NULL,"NO",115);
INSERT INTO UBICACION VALUES("ISP","Isla Petalia","NPC7","SI",4656);
INSERT INTO UBICACION VALUES("ISF","Isla Flaurelia","NPC8","SI",3571);

```

```

-----
CREATE TABLE GIMNASIO (
  ID_GIMNASIO VARCHAR(10) NOT NULL,
  NOMBRE_LIDER varchar(50) NOT NULL,
  TIPO_GIMNASIO VARCHAR(30) NOT NULL,
  NOMBRE_MEDALLA VARCHAR(10) NOT NULL,
  ID_UBICACION VARCHAR (3) NOT NULL,
  ID_MO INT(2),
  PRIMARY KEY (ID_GIMNASIO)
);

INSERT INTO GIMNASIO VALUES("NPC1","BROCK","ROCA","MARMOLITA","CDK",01);
INSERT INTO GIMNASIO
VALUES("NPC2","CAPITAN_ANTHONY","ELECTRICO","CHISPITA","PBP",05);
INSERT INTO GIMNASIO
VALUES("NPC3","LANA","HIELO","CARAMBANITA","CDP",NULL);
INSERT INTO GIMNASIO
VALUES("NPC4","SURFISTA_FU","AGUA","OLEADITA","PBL",02);
INSERT INTO GIMNASIO VALUES("NPC5","CELIA","FUEGO","LLAMITA","CDF",04);
INSERT INTO GIMNASIO
VALUES("NPC6","CHARLES","PLANTA","MARGARITA","ISC",NULL);
INSERT INTO GIMNASIO
VALUES("NPC7","MIA","NORMAL","NORMALITA","ISP",NULL);
INSERT INTO GIMNASIO
VALUES("NPC8","GIOVANNI","TIERRA","FANGONITA","ISF",03);

```

---6. Consultas:

---a. Crea 10 búsquedas sencillas usando IN, BETWEEN, ...

```

SELECT ID_POKEBALL FROM POKEBALL WHERE PRECIO BETWEEN 50 AND 800
ORDER BY NOMBRE_POKEBALL;

```

```

SELECT NOMBRE_POKEBALL FROM POKEBALL WHERE NOT CAPTURA_PORCENTAJE
BETWEEN 60 AND 80;

```

```

SELECT TIPO1,TIPO2 FROM POKEMON WHERE N_POKEDEX BETWEEN 20 AND 30
ORDER BY 2;

```

```

+-----+
| NOMBRE_LIDER |
+-----+
| CELIA        |
| MIA          |
| BROCK        |
+-----+
3 rows in set (0.00 sec)

```

```
SELECT N_POKEDEX FROM POKEMON WHERE TIPO1 IN ("HIELO","TIERRA") ORDER BY NOMBRE;
```

```
SELECT POBLACION FROM UBICACION WHERE ID_UBICACION IN("ISC","ISF","ISP");
```

```
SELECT NOMBRE_UBICACION FROM UBICACION WHERE POBLACION BETWEEN 8000 AND 80000;
```

```
SELECT ID_GIMNASIO FROM GIMNASIO WHERE NOT ID_MO BETWEEN 3 AND 5;
```

```
SELECT NOMBRE_LIDER FROM GIMNASIO WHERE NOMBRE_MEDALLA IN ("NORMALITA","MARMOLITA","LLAMITA") ORDER BY TIPO_GIMNASIO;
```

```
-----  
SELECT ID_MO FROM MOS WHERE NOT OBJETIVO IN ("ARBOL","CAJA");
```

```
+-----+  
| ID_MO |  
+-----+  
|      2 |  
|      3 |  
|      5 |  
+-----+
```

```
3 rows in set (0.00 sec)
```

```
SELECT NOMBRE FROM POKEMON WHERE EVOLUCION IN("SI") LIMIT 10;
```

```
SELECT * FROM POKEMON LIMIT 10;
```

```
SELECT N_POKEDEX FROM POKEMON WHERE NOMBRE LIKE"B%" ORDER BY TIPO1;
```

```
+-----+  
| N_POKEDEX |  
+-----+  
|          12 |  
|          15 |  
|           1 |  
|          69 |  
+-----+
```

```
4 rows in set (0.00 sec)
```

```
SELECT NOMBRE_UBICACION AS"UBICACIONES IMPORTANTES" FROM UBICACION WHERE TIENE_LEGENDARIO="SI" OR ID_GIMNASIO IS NOT NULL;
```

```
SELECT TIPO_GIMNASIO FROM GIMNASIO WHERE ID_MO IS NULL;
```

```
+-----+  
| TIPO_GIMNASIO |  
+-----+  
| HIELO          |  
| PLANTA         |
```

```

| NORMAL          |
+-----+
3 rows in set (0.00 sec)

```

```

SELECT ID_UBICACION FROM UBICACION WHERE POBLACION>5200;

```

```

+-----+
| ID_UBICACION |
+-----+
| CDA          |
| CDC          |
| CDF          |
| CDK          |
| CDP          |
| CDV          |
+-----+
6 rows in set (0.00 sec)

```

---b. Crea 5 búsquedas con Subselect

```

SELECT NOMBRE_POKEBALL, ID_POKEBALL FROM POKEBALL WHERE PRECIO =
(SELECT MAX(PRECIO) FROM POKEBALL);

```

```

+-----+-----+
| NOMBRE_POKEBALL | ID_POKEBALL |
+-----+-----+
| MASTERBALL      | MB          |
+-----+-----+
1 row in set (0.00 sec)

```

```

SELECT N_POKEDEX, TIPO1, TIPO2 FROM POKEMON WHERE NOT
CHAR_LENGTH(NOMBRE) < (SELECT AVG(CHAR_LENGTH(NOMBRE)) FROM POKEMON);

```

```

SELECT ID_UBICACION, TIENE_LEGENDARIO FROM UBICACION WHERE POBLACION >
(SELECT MIN(POBLACION) FROM UBICACION) LIMIT 3;

```

```

+-----+-----+
| ID_UBICACION | TIENE_LEGENDARIO |
+-----+-----+
| CDA          | NO               |
| CDC          | SI               |
| CDF          | SI               |
+-----+-----+
3 rows in set (0.00 sec)

```

```

SELECT NOMBRE_LIDER FROM GIMNASIO WHERE (ID_UBICACION LIKE "I%" AND
ID_MO IS NOT NULL) OR (ID_MO > (SELECT AVG(ID_MO) FROM GIMNASIO));

```

```

SELECT NOMBRE_MO, OBJETIVO FROM MOS WHERE ID_MO >= (SELECT MIN(ID_MO)*3
FROM MOS);

```

```

+-----+-----+
| NOMBRE_MO      | OBJETIVO        |
+-----+-----+

```

```
+-----+-----+
| SURF      | LAGO      |
| FUERZA    | CAJA      |
| ROMPE_ROCAS | ROCA      |
+-----+-----+
3 rows in set (0.00 sec)
```

--c. Crea 5 búsquedas con Join

```
SELECT
GIMNASIO.NOMBRE_LIDER,GIMNASIO.ID_GIMNASIO,UBICACION.NOMBRE_UBICACION
FROM GIMNASIO,UBICACION WHERE
GIMNASIO.ID_UBICACION=UBICACION.ID_UBICACION;
```

```
+-----+-----+-----+
| NOMBRE_LIDER | ID_GIMNASIO | NOMBRE_UBICACION |
+-----+-----+-----+
| BROCK        | NPC1        | Ciudad Carmín    |
| CAPITAN_ANTHONY | NPC2        | Pueblo Paleta    |
| LANA         | NPC3        | Ciudad Plateada  |
| SURFISTA_FU  | NPC4        | Pueblo Lavanda   |
| CELIA        | NPC5        | Ciudad Fucsia    |
| CHARLES      | NPC6        | Isla Canela      |
| MIA          | NPC7        | Isla Petalia     |
| GIOVANNI     | NPC8        | Isla Flaurelia   |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
SELECT POKEMON.N_POKEDEX,POKEMON.NOMBRE,POKEBALL.CAPTURA_PORCENTAJE
FROM POKEMON,POKEBALL WHERE POKEMON.ID_POKEBALL=POKEBALL.ID_POKEBALL AND
PRECIO > 300;
```

```
SELECT POKEMON.NOMBRE,POKEMON.ID_POKEBALL,GIMNASIO.NOMBRE_MEDALLA
FROM POKEMON,GIMNASIO WHERE POKEMON.TIPO2=GIMNASIO.TIPO_GIMNASIO;
```

```
SELECT
UBICACION.ID_UBICACION,GIMNASIO.ID_GIMNASIO,UBICACION.POBLACION FROM
UBICACION,GIMNASIO WHERE UBICACION.ID_UBICACION=GIMNASIO.ID_UBICACION AND
UBICACION.POBLACION>(SELECT AVG(POBLACION)FROM UBICACION);
```

```
+-----+-----+-----+
| ID_UBICACION | ID_GIMNASIO | POBLACION |
+-----+-----+-----+
| CDP          | NPC3        | 147992    |
| CDF          | NPC5        | 253689    |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
SELECT
GIMNASIO.ID_GIMNASIO,GIMNASIO.NOMBRE_LIDER,UBICACION.TIENE_LEGENDARIO,MOS
.NOMBRE_MO,MOS.OBJETIVO FROM GIMNASIO,UBICACION,MOS WHERE
```

```
UBICACION.ID_UBICACION=GIMNASIO.ID_UBICACION AND GIMNASIO.ID_MO=MOS.ID_MO
AND GIMNASIO.TIPO_GIMNASIO NOT LIKE ("T%");
```

```
+-----+-----+-----+-----+-----+
-----+
| ID_GIMNASIO | NOMBRE_LIDER | TIENE_LEGENDARIO | NOMBRE_MO |
OBJETIVO |
+-----+-----+-----+-----+
-----+
| NPC1 | BROCK | NO | CORTE |
ARBOL |
| NPC2 | CAPITAN_ANTHONY | NO | ROMPE_ROCAS |
ROCA |
| NPC4 | SURFISTA_FU | NO | VUELO |
AIRE |
| NPC5 | CELIA | SI | FUERZA |
CAJA |
+-----+-----+-----+-----+
-----+
```

```
4 rows in set (0.00 sec)
```

---d. Haz 5 Actualizaciones de las tablas con condiciones.

```
UPDATE POKEBALL SET PRECIO=1.5*PRECIO;
```

```
Query OK, 4 rows affected (0.06 sec)
```

```
Rows matched: 4 Changed: 4 Warnings: 0
```

```
UPDATE UBICACION SET POBLACION=POBLACION/1.2 WHERE POBLACION>12000;
```

```
INSERT INTO POKEMON
```

```
VALUES(152,"GROUDON","FUEGO","TIERRA","NO","ISF","MB");
```

```
Query OK, 1 row affected (0.02 sec)
```

```
UPDATE POKEMON SET TIPO2="OSCURIDAD" WHERE NOMBRE="GENGAR";
```

```
UPDATE POKEMON SET TIPO1="SEXY" WHERE NOMBRE="GROUDON";
```

```
UPDATE GIMNASIO SET NOMBRE_LIDER="Sergi-Guapo" WHERE ID_MO=4;
```

```
Query OK, 1 row affected (0.05 sec)
```

```
Rows matched: 1 Changed: 1 Warnings: 0
```

---e. Borra alguna fila

```
DELETE FROM POKEMON WHERE TIPO2 IS NULL;
```

```
Query OK, 88 rows affected (0.03 sec)
```

---7. Uso de Funciones. Aplica 5 funciones de las vistas en clase en algún ejemplo.

```
SELECT GROUP_CONCAT(DISTINCT TIPO1) AS "TODOS LOS TIPOS DE POKEMON
QUE EXISTEN" FROM POKEMON;
```

```
+-----+
-----+
```

| TODOS LOS TIPOS DE POKEMON QUE
EXISTEN |

+-----+
-----+

| PLANTA,FUEGO,BICHO,NORMAL,VENENO
,AGUA,ROCA,ELECTRICO,FANTASMA,TIERRA,PSIQUICO,HIELO,DRAGÓN |

+-----+
-----+

1 row in set (0.02 sec)

SELECT LEFT(NOMBRE_MEDALLA,6) FROM GIMNASIO;

+-----+

| LEFT(NOMBRE_MEDALLA,6) |

+-----+

MARMOL	
CHISPI	
CARAMB	
OLEADI	
LLAMIT	
MARGAR	
NORMAL	
FANGON	

+-----+

8 rows in set (0.02 sec)

SELECT LOWER(ID_UBICACION),LOWER(NOMBRE_UBICACION) FROM UBICACION;

+-----+

| LOWER(ID_UBICACION) | LOWER(NOMBRE_UBICACION) |

+-----+

cda	ciudad azafrán	
cdc	ciudad celeste	
cdf	ciudad fucsia	
cdk	ciudad carmín	
cdp	ciudad plateada	
cdv	ciudad verde	
isc	isla canela	
isf	isla flaurelia	
isp	isla petalia	
pbl	pueblo lavanda	
pbp	pueblo paleta	
pbs	pueblo sésamo	

+-----+

12 rows in set (0.01 sec)

SELECT SUBSTRING_INDEX(NOMBRE_POKEBALL,"B",1) AS
"CALIDAD",SUBSTRING(NOMBRE_POKEBALL,-4) FROM POKEBALL;

+-----+

| CALIDAD | SUBSTRING(NOMBRE_POKEBALL,-4) |

+-----+

MASTER	BALL
POKE	BALL
SUPER	BALL
ULTRA	BALL

+-----+

4 rows in set (0.00 sec)

```
SELECT CONCAT(ID_UBICACION,POBLACION,TIENE_LEGENDARIO) AS  
"SUPERCODIGO UBICACION"FROM UBICACION;
```

+-----+

SUPERCODIGO UBICACION

+-----+

CDA73223NO
CDC26328SI
CDF253689SI
CDK25476NO
CDP147992NO
CDV65841NO
ISC562SI
ISF3571SI
ISP4656SI
PBL856NO
PBP1520NO
PBS115NO

+-----+

12 rows in set (0.00 sec)