WE Assignment 4 - Bhavani Chalasani

Tables Made: Pokemon, Move, Type

COMMANDS

Making the DB

create database POKEMON; use POKEMON;

1. Making The Tables

CREATE TABLE TYPE(TYPE_ID INT PRIMARY KEY, TYPE_NAME VARCHAR(20));

CREATE TABLE POKEMON (POKEMON_ID INT PRIMARY KEY, NAME VARCHAR(30), PRIMARY_TYPE_ID INT, SECONDARY_TYPE_ID INT DEFAULT NULL, FOREIGN KEY (PRIMARY_TYPE_ID) REFERENCES TYPE(TYPE_ID), FOREIGN KEY (SECONDARY_TYPE_ID) REFERENCES TYPE(TYPE_ID));

CREATE TABLE MOVE (POKEMON_ID INT, MOVE_ID INT, MOVE_NAME VARCHAR(30), MOVE_TYPE INT, MOVE_POWER INT, PRIMARY KEY (POKEMON_ID, MOVE_ID), FOREIGN KEY (POKEMON_ID) REFERENCES POKEMON(POKEMON_ID), FOREIGN KEY(MOVE_TYPE) REFERENCES TYPE(TYPE_ID));

2. Populating The Tables

Populating the TYPE Table

```
INSERT INTO TYPE VALUES(1,'GRASS');
INSERT INTO TYPE VALUES(2,'FIRE');
INSERT INTO TYPE VALUES(3,'WATER');
INSERT INTO TYPE VALUES(4,'NORMAL');
INSERT INTO TYPE VALUES(5,'FLYING');
```

Populating the POKEMON Table

- INSERT INTO POKEMON VALUES(1, 'Bulbasaur', 1, NULL);
- INSERT INTO POKEMON VALUES(2, 'Charmander', 2, NULL);
- INSERT INTO POKEMON VALUES(3,'Squirtle,3,NULL);
- 4. INSERT INTO POKEMON VALUES(4, 'Eevee', 4, NULL);
- INSERT INTO POKEMON VALUES(5, 'Pidgey', 5, 4);

Populating the MOVE Table

- 6. INSERT INTO MOVE VALUES(1,1,'Tackle',4,35); INSERT INTO MOVE VALUES(1,4,'Vine Whip',1,40); INSERT INTO MOVE VALUES(1,7,'Return',4,100);
- 7. INSERT INTO MOVE VALUES(2,1,'Tackle',4,35); INSERT INTO MOVE VALUES(2,7,'Return',4,100); INSERT INTO MOVE VALUES(2,3,'Ember',2,40);
- 8. INSERT INTO MOVE VALUES(3,1,'Tackle',4,35); INSERT INTO MOVE VALUES(3,2,'Water Gun',3,40); INSERT INTO MOVE VALUES(3,7,'Return',4,100);
- 9. INSERT INTO MOVE VALUES(4,1,'Tackle',4,35); INSERT INTO MOVE VALUES(4,6,'Headbutt',4,70); INSERT INTO MOVE VALUES(4,7,'Return',4,100);
- 10. INSERT INTO MOVE VALUES(5,1,'Tackle',4,35); INSERT INTO MOVE VALUES(5,5,'Wing Attack',5,65); INSERT INTO MOVE VALUES(5,7,'Return',4,100);

3. Query That Returns All The Pokemon Who Can Learn 'Return'

SELECT NAME FROM POKEMON P JOIN MOVE M ON P.POKEMON_ID=M.POKEMON_ID AND M.MOVE_NAME='Return';

4. Query That Returns All The Moves In The Game That Are Powerful Against Grass

SELECT MOVE_NAME FROM MOVE WHERE MOVE_TYPE IN (2,5); or

SELECT MOVE_NAME FROM MOVE M JOIN TYPE T ON M.MOVE_TYPE=T.TYPE_ID WHERE T.TYPE_NAME IN ('FIRE','FLYING');

Final Tables

```
mysql> SELECT * FROM MOVE;
 POKEMON_ID | MOVE_ID | MOVE_NAME | MOVE_TYPE | MOVE_POWER |
           1 | 1 | Tackle | 4 | 35 |
1 | 4 | Vine Whip | 1 | 40 |
1 | 7 | Return | 4 | 100 |
                   1 | Tackle
3 | Ember
7 | Return
                                                 4 |
                                                              35
            2 |
                                                4 |
2 |
4 |
4 |
3 |
4 |
4 |
                                                              40
            2
                                                             100
            2
                    1 | Tackle
2 | Water Gun
7 | Return
                                                              35
40
            3 |
           3 |
           3
                                                             100
                    1 | Tackle
6 | Headbutt
           4
                                                               35
                                                4 |
4 |
4 |
                                                               70
            4
           4 |
                                                             100
                     7 | Return
           5 |
                    1 | Tackle
                                                               35
           5 | 5 | Wing Attack | 5 | 65
5 | 7 | Return | 4 | 100
                                                              65
15 rows in set (0.00 sec)
mysql> SELECT * FROM POKEMON;
| POKEMON_ID | NAME | PRIMARY_TYPE_ID | SECONDARY_TYPE_ID |
           1 | Bulbasaur | 1 | 2 | Charmander | 2 | 3 | 3 | 4 | Eevee | 4 | 5 | Pidgey | 5 |
                                                                NULL |
                                                                NULL |
           3 | Squirtle
                                                                NULL I
                                                                NULL I
          5 | Pidgey |
                                                                4
5 rows in set (0.00 sec)
mysql> SELECT * FROM TYPE;
| TYPE_ID | TYPE_NAME |
        1 GRASS
       2 | FIRE
       3 | WATER
        4 | NORMAL
       5 | FLYING
5 rows in set (0.00 sec)
```