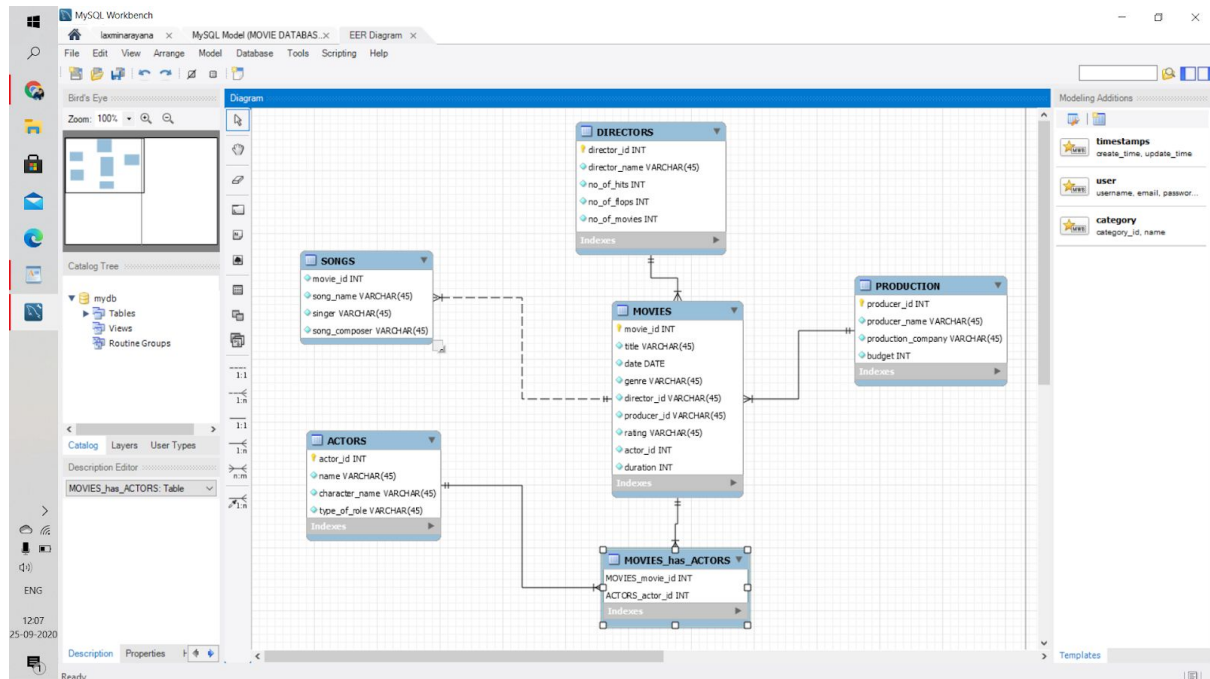


1. Showcase one Many-Many relation.

MOVIES to ACTORS is MANY-MANY relation



2. Represent Composite key and Weak Entity in your Database

Weak entity : "songs" in the above er diagram

Composite key : In directors entity (no.of hits,no. of flops) is composite key.

3. Show Violation of Primary Key, Unique Not Null and default key constraints through insertion.

create database movie;

use movie;

```
create table mov_dup(movie_id int primary key, movie_name varchar(45) unique, budget int not null, lead_role_gender varchar(45) default "male");
```

```
insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
```

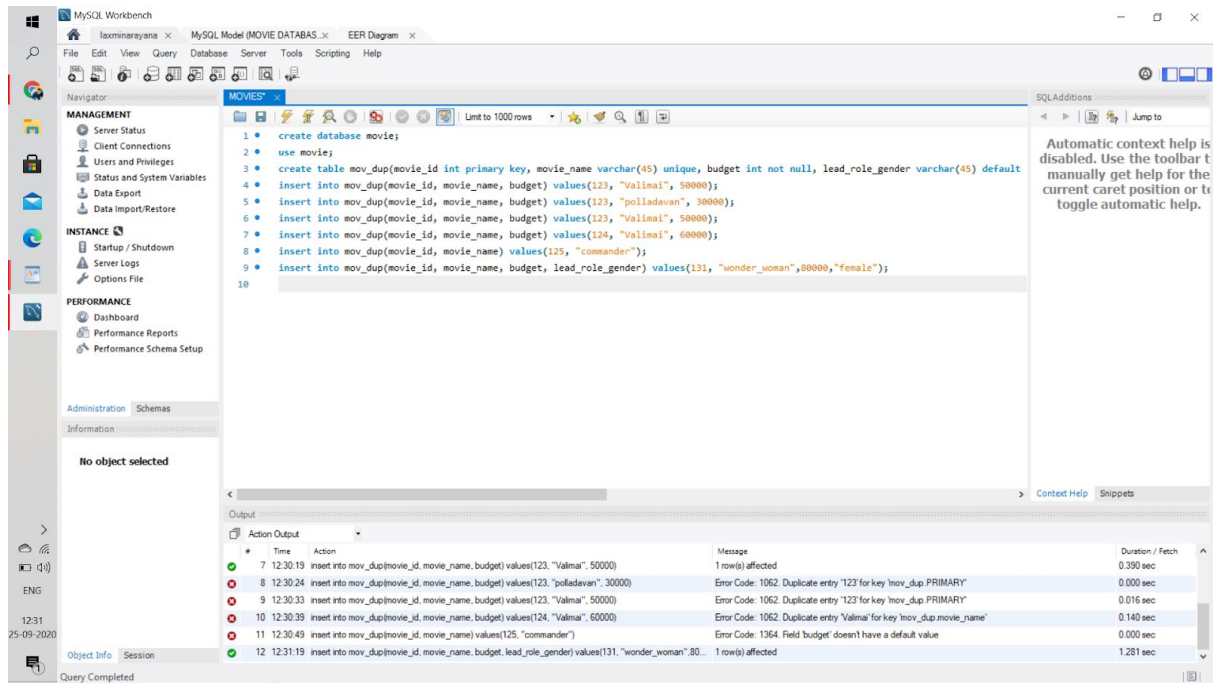
```
insert into mov_dup(movie_id, movie_name, budget) values(123, "polladavan", 30000);
```

```
insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
```

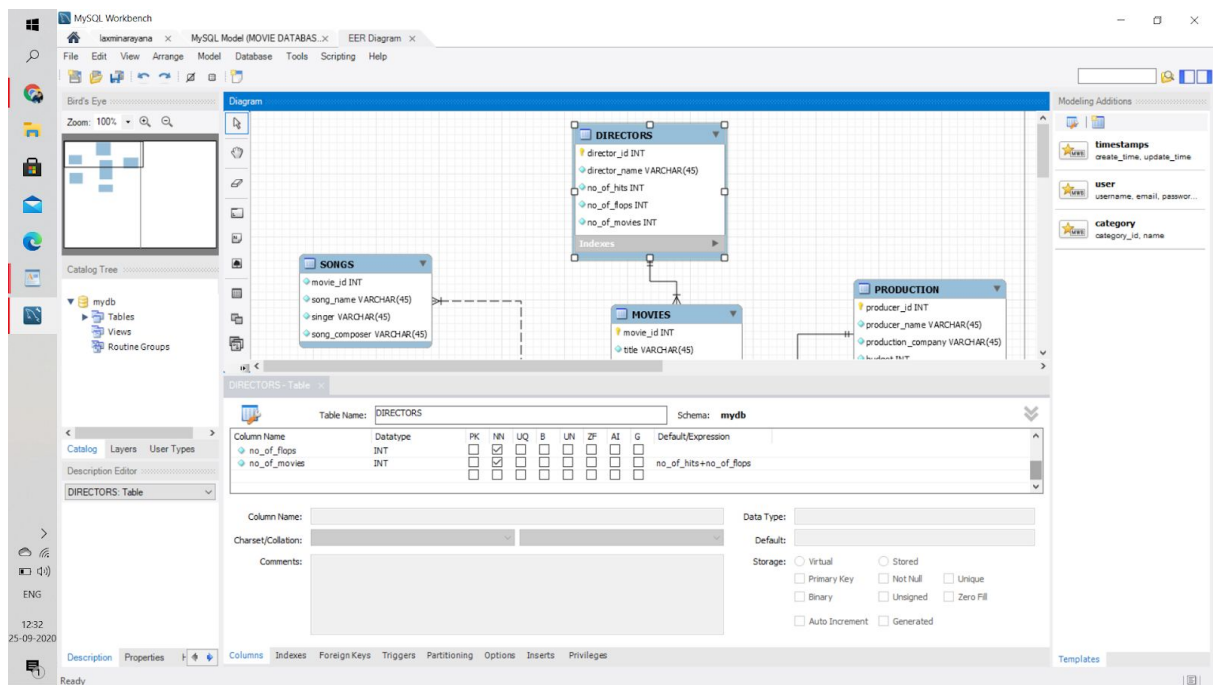
```
insert into mov_dup(movie_id, movie_name, budget) values(124, "Valimai", 60000);
```

```
insert into mov_dup(movie_id, movie_name) values(125, "commander");
```

```
insert into mov_dup(movie_id, movie_name, budget, lead_role_gender) values(131, "wonder_woman", 80000, "female");
```



4. One Derived attribute should be added to the Database design



5. Insert tuples into the table and see how foreign key constraint works if you try to insert into dependent table first.

create table mov_dup(movie_id int primary key, movie_name varchar(45) unique, budget int not null, lead_role_gender varchar(45) default "male");

```

insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
insert into mov_dup(movie_id, movie_name, budget) values(123, "polladavan", 30000);
insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
insert into mov_dup(movie_id, movie_name, budget) values(124, "Valimai", 60000);
insert into mov_dup(movie_id, movie_name) values(125, "commander");
insert into mov_dup(movie_id, movie_name, budget, lead_role_gender) values(131,
"wonder_woman",80000,"female");
create table songs1(movie_id int, song_name varchar(45), singer varchar(45), composer
varchar(45),
foreign key(movie_id) references mov_dup(movie_id));
insert into songs1 values(123, "Dil_bechara", "Mariam", "ar_rahman");

```

The screenshot shows the MySQL Workbench interface with a SQL script in the central editor. The script contains several SQL statements, including database creation, table creation, and data insertion. The output pane at the bottom displays the execution results, including errors.

SQL Script:

```

1 create database movie;
2 use movie;
3 create table mov_dup(movie_id int primary key, movie_name varchar(45) unique, budget int not null, lead_role_gender varchar(45) default
4 insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
5 insert into mov_dup(movie_id, movie_name, budget) values(123, "polladavan", 30000);
6 insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000);
7 insert into mov_dup(movie_id, movie_name, budget) values(124, "Valimai", 60000);
8 insert into mov_dup(movie_id, movie_name) values(125, "commander");
9 insert into mov_dup(movie_id, movie_name, budget, lead_role_gender) values(131, "wonder_woman",80000,"female");
10 create table songs1(movie_id int, song_name varchar(45), singer varchar(45), composer varchar(45),
11 foreign key(movie_id) references mov_dup(movie_id));
12 insert into songs1 values(123, "Dil_bechara", "Mariam", "ar_rahman");

```

Output:

#	Time	Action	Message	Duration / Fetch
9	12:30:33	insert into mov_dup(movie_id, movie_name, budget) values(123, "Valimai", 50000)	Error Code: 1062. Duplicate entry '123' for key 'mov_dup.PRIMARY'	0.016 sec
10	12:30:39	insert into mov_dup(movie_id, movie_name, budget) values(124, "Valimai", 60000)	Error Code: 1062. Duplicate entry 'Valimai' for key 'mov_dup.movie_name'	0.140 sec
11	12:30:49	insert into mov_dup(movie_id, movie_name) values(125, "commander")	Error Code: 1364. Field 'budget' doesn't have a default value	0.000 sec
12	12:31:15	insert into mov_dup(movie_id, movie_name, budget, lead_role_gender) values(131, "wonder_woman",80000,"female")	1 row(s) affected	1.281 sec
13	12:34:19	create table songs1(movie_id int, song_name varchar(45), singer varchar(45), composer varchar(45), fore...	0 row(s) affected	1.656 sec
14	12:34:25	insert into songs1 values(123, "Dil_bechara", "Mariam", "ar_rahman")	Error Code: 3058. The table does not comply with the requirements by an external plugin.	0.015 sec

Query interrupted