

DDL:

```
CREATE TABLE ratings (  
  rating      VARCHAR(10)      NOT NULL,  
  CONSTRAINT ratings PRIMARY KEY(rating)  
);  
  
CREATE TABLE movies (  
  title        VARCHAR(220)      NOT NULL,  
  yearReleased INT              NOT NULL,  
  distributor   VARCHAR(220)      NOT NULL,  
  rating        VARCHAR(10)      NOT NULL,  
  CONSTRAINT movies PRIMARY KEY(title, yearReleased, distributor, rating),  
  CONSTRAINT rating FOREIGN KEY(rating)  
    REFERENCES ratings(rating)  
);  
  
CREATE TABLE genre (  
  genre        VARCHAR(220)      NOT NULL,  
  CONSTRAINT genre PRIMARY KEY(genre)  
);  
  
CREATE TABLE MovieInfo (  
  title        VARCHAR(220)      NOT NULL,  
  yearReleased INT              NOT NULL,  
  distributor   VARCHAR(220)      NOT NULL,  
  rating        VARCHAR(10)      NOT NULL,  
  genreName     VARCHAR(220)      NOT NULL,  
  CONSTRAINT MovieInfo PRIMARY KEY(title, yearReleased, genreName),  
  
  CONSTRAINT MovieInfo_1 FOREIGN KEY(title, yearReleased, distributor, rating)  
    REFERENCES movies(title, yearReleased, distributor, rating),  
  CONSTRAINT genre 1 FOREIGN KEY(genreName)  
    REFERENCES genre(genre)  
);
```

DML:

```
CREATE TABLE ratings (  
  rating      VARCHAR(10)      NOT NULL,  
  CONSTRAINT ratings PRIMARY KEY(rating)  
);  
  
CREATE TABLE movies (  
  title        VARCHAR(220)      NOT NULL,  
  yearReleased INT              NOT NULL,  
  distributor   VARCHAR(220)      NOT NULL,  
  rating        VARCHAR(10)      NOT NULL,  
  CONSTRAINT movies PRIMARY KEY(title, yearReleased, distributor, rating),  
  CONSTRAINT rating FOREIGN KEY(rating)  
    REFERENCES ratings(rating)  
);  
  
CREATE TABLE genre (  
  genre        VARCHAR(220)      NOT NULL,
```

```

CONSTRAINT genre PRIMARY KEY(genre)
);
CREATE TABLE MovieInfo (
    title          VARCHAR(220)    NOT NULL,
    yearReleased   INT              NOT NULL,
    distributor     VARCHAR(220)    NOT NULL,
    rating          VARCHAR(10)     NOT NULL,
    genreName       VARCHAR(220)    NOT NULL,
    CONSTRAINT MovieInfo PRIMARY KEY(title, yearReleased, genreName),

    CONSTRAINT MovieInfo_1 FOREIGN KEY(title, yearReleased, distributor, rating)
        REFERENCES movies(title, yearReleased, distributor, rating),
    CONSTRAINT genre_1 FOREIGN KEY(genreName)
        REFERENCES genre(genre)
);

```

SQL Queries:

```
select count(*), GENRENAME from "MOVIEINFO" group by GENRENAME;
```

	1	GENRENAME
1	2	Action
2	1	Adventure
3	1	Mock Violence
4	1	Romance
5	1	Science Fiction
6	1	Swashbuckling

```
select count(*), TITLE from "MOVIEINFO" group by TITLE;
```

	1	TITLE
1	2	Fast Times at Ridgemont High
2	3	Pirates of the Caribbean: the Curse of the Black Pearl
3	2	Star Trek Heart of Darkness

```
select count(distinct TITLE), RATINGS.RATING from RATINGS left join MOVIEINFO M
on RATINGS.RATING = M.RATING group by RATINGS.RATING;
```

	1	RATING
1	0	G
2	0	MA
3	0	PG
4	2	PG-13
5	1	R