

A. 1.

Queries that can be supported:

SELECT:

We can get the name, gender, birth date and nationality by actor's id.

We can get the title, genre, release date and review by movie's id.

We can get the name and nationality by director's id.

We can get the information of a movie's actors or the director by its movie id.

We can get the list of information of actors who work with a specific director by the director's id.

We can get information of actors and directors who come from the same country.

UPDATE:

We can update movie's review.

INSERT:

We can insert new movie, and update corresponding actor and director information.

DELETE:

We can delete actor or movie.

2.

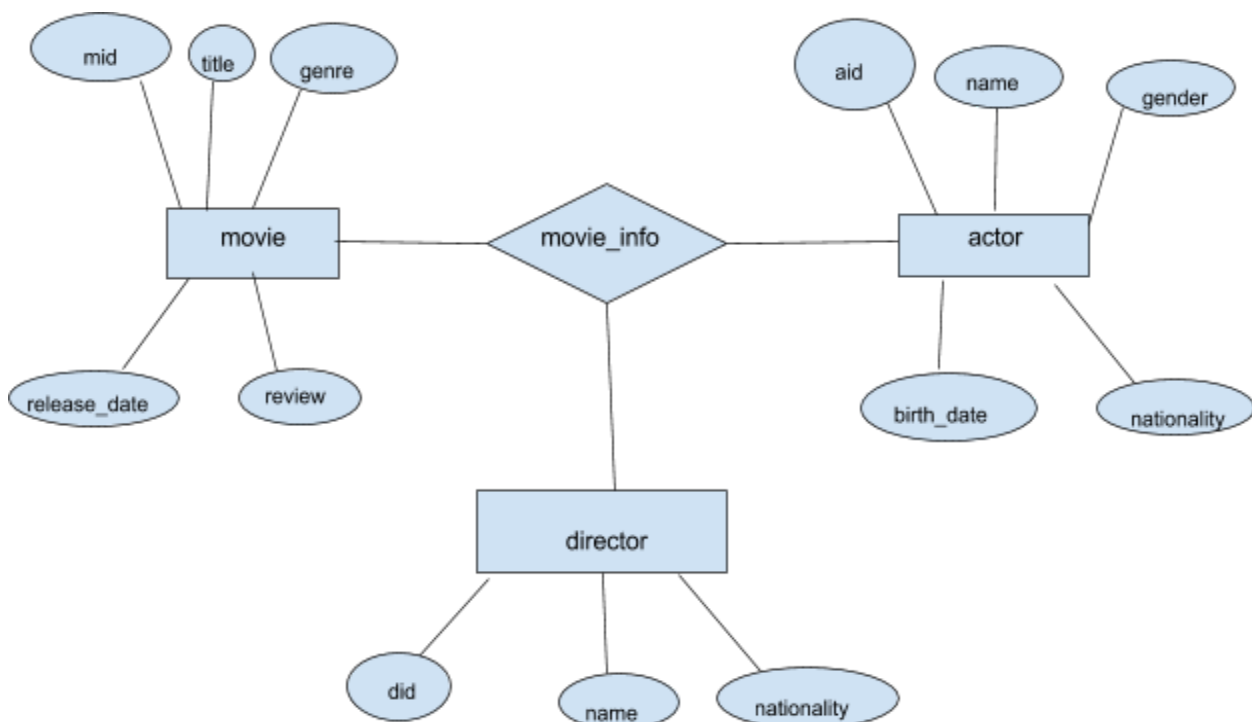
movie - actor: many-to-many

movie - director: many-to-many

director - actor: many-to-many

key: mid(movie), aid(actor), did(director)

range: review(0-10)



B.1

1.

{Store -> Type, Size;

WeekDate -> IsHoliday;

Store, WeekDate -> UnemploymentRate, FuelPrice, CPI, Temperature;

Dept, Store, WeekDate -> WeeklySales}

2.

R0 = {Store, Type, Size}

Key: {Store}

R1 = {WeekDate, IsHoliday}

Key: {WeekDate}

R2 = {Store, WeekDate, UnemploymentRate, FuelPrice, CPI, Temperature}

Key: {Store, WeekDate}

Foreign Key: {WeekDate}

{Store}

R3 = {Dept, Store, WeekDate, WeeklySales}

Key: {Dept, Store, WeekDate}

Foreign Key: {Store, WeekDate}

{Store}

{WeekDate}