

## Reduction of entities:

crew(first\_name, last\_name, dob, gender)

PK: first\_name, last\_name

project(title, release\_year, studio, series)

PK: title, release\_year

character(identity, hero\_name)

PK: identity

character\_power(identity, power) /\* multivalued attribute to character \*/

PK: identity, power

FK: character\_power(identity) -> character(identity)

episode(title, release\_year, season, episode\_no, episode\_title)

PK: title, release year, season, episode no

FK: episode(title) -> show(title)

episode(release year) -> show(release year)

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Reduction of ISA relationships:
movie(title, release_year)
PK: title, release year
FK: movie(title) -> project(title)
      movie(release_year) -> project(release_year)
show(title, release_year)
PK: title, release year
FK: show(title) -> project(title)
      show(release_year) -> project(release_year)
director(first_name, last_name)
PK: first name, last name
FK: director(first_name) -> crew(first_name)
      director(last_name) -> crew(last_name)
actor(first_name, last_name)
PK: first name, last name
FK: actor(first_name) -> crew(first_name)
      actor(last_name) -> crew(last_name)
Reduction of relationships:
episode_director(first_name, last_name, title, release_year, season, episode_no)
PK: first name, last name, title, release year, season, episode no
FK: episode_director(first_name) -> director(first_name)
      episode director(last name) -> director(last name)
      episode_director(title) -> episode(title)
      episode director(release year) -> episode(release year)
      episode_director(season) -> episode(season)
      episode_director(episode_no) -> episode(episode_no)
movie_director(first_name, last_name, title, release_year)
PK: first name, last name, title, release year
FK: movie director(first name) -> director(first name)
      movie_director(last_name) -> director(last_name)
      movie director(title) -> movie(title)
      movie_director(release_year) -> movie(release_year)
plays(first_name, last_name, title, release_year, identity)
PK: first name, last name, title, release year, identity
FK: plays(first_name) -> actor(first_name)
      plays(last_name) -> actor(last_name)
      plays(title) -> project(title)
      plays(release_year) -> project(release_year)
      plays(identity) -> character(identity)
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