## PS 1: Problem 16 Relational-algebra queries

## problem 16.1

PROJECT{Oscar.year, Oscar.type, movie.name}(SELECT{Person.name = 'Meryl Streep'})(JOIN{Oscar.movie\_id = Movie.id}, {Oscar.person\_id = Person.id})

## problem 16.2

PROJECT{Actor.id}(JOIN{Actor.movie\_.id = Movie.id}) - PROJECT{Actor.id}(SELECT{Movie year >= 2010})(JOIN{Actor.movie\_.id = Movie.id})

## problem 16.3

 $\label{lem:project} PROJECT\{Person.name,\ Oscar.type,\ Oscar.year\}(SELECT\{Person.pob\ LIKE\ '\%Spain'\})(LEFT\ OUTER\ JOIN\{Person.id\ =\ Oscar.person\_id\}$