Lab 1: An Algebraic Query Language

# We have the database schema consists of five relations:

Movies (title, year, length, genre, studioName, producer#)

StarsIn (movieTitle, movieYear, starName)

MovieStar (name, address, gender, birthdate)

MovieExec (producer#, name, address, netWorth)

Studio (name, address, presC#)

Write expressions of relational algebra to answer the following queries.

1. Find title and length of movies produced by Disney in 1990.
2. Find date of birth of Aishwarya Rai who is a movie star.
3. Find the address of studio Film City.
4. List name of the female stars in the film “Monsoon Wedding”.
5. List name and gender of stars that appeared in movies produced by Sony in 2005.
6. Find name of the producer of Star Wars.
7. Find name of executives that are worth more than Subhash Ghai.
8. Find title of movies that are no longer than “Bride and Prejudice”.
9. List all the titles and years of movies that appeared in either the Movies or StarsIn relation.
10. Find name and address of all male movie stars who are also movie executives with a net worth under $10,000,000.