

# 6-19-2017

## Examples from 6notes17 part 1

Movie(Title,Year,length,inColor,studioName,producerC#)

StarsIn(MovieTitle,MovieYear,StarName)

MovieStar(Name,address,gender,birthdate)

MovieExec(name,address,Cert#,netWorth)

Studio(Name,address,presC#)

Find the oldest movie star.

- select name from moviestar where age >= ALL (select age from moviestar)

Find the producers of Harrison Ford's movies.

1. Using Cartesian Product
  - select from starsin si, movie m, movieExec me where si.starname = 'Harrison Ford' AND m.title = si.movietitle AND m.year = si.movieyear AND me.certNum = m.producerCnum
2. Using nested subqueries and comparison operator IN
  - select name from movieExec where cert# IN (select producerC# from movies where (title,year) IN (select movietitle, movieyear from starsin where starname = 'Harrison Ford'))

## Examples from 6notes17 part 2

Movie(Title,Year,length,inColor,studioName,producerC#)

StarsIn(MovieTitle,MovieYear,StarName)

MovieStar(Name,address,gender,birthdate)

MovieExec(name,address,Cert#,netWorth)

Studio(Name,address,presC#)

Find all Movie Stars who are younger than the oldest colleague of their gender.

- select name from moviestar as old where age < ANY (select age from moviestar where gender = old.gender)

Find all producers who made at least one film before 1990 can be rewritten to.

- select name from movieExec as me where EXISTS (select producer# from movie where year < 1990 AND me.cert# = producer#)

## Examples from 6notes17 part 4

Movie(Title,Year,length,inColor,studioName,producerC#)

StarsIn(MovieTitle,MovieYear,StarName)

MovieStar(Name,address,gender,birthdate)

MovieExec(name,address,Cert#,netWorth)

Studio(Name,address,presC#)

Find each producer's total length of film produced.

- select name, SUM(length) from movie, movieExec where producerC# = cert# GROUP BY name ORDER BY name ASC

For each movie star, list the sum of the length of all the movies they have acted in AND the length of the longest movie they have acted in.

- select starname, SUM(length), MAX(length) from starsin, movie where movietitle = title AND movieyear = year GROUP BY starname
- select starname, SUM(length), MAX(length) from starsin, movie where movietitle = title AND movieyear = year GROUP BY starname UNION select name, 0, 0 from moviestar where name NOT IN (select starname from starsin)

## Examples from 6notes17 part 5

Movie(Title,Year,length,inColor,studioName,producerC#)

StarsIn(MovieTitle,MovieYear,StarName)

MovieStar(Name,address,gender,birthdate)

MovieExec(name,address,Cert#,netWorth)

Studio(Name,address,presC#)

Find total length of movies for producers with net worth greater than \$5000.

- select name, SUM(length) from movie, movieExec where producerC# = cert# GROUP BY name HAVING netWorth < 5000 AND SUM(length) > 100

Find total film length for only those producers who made at least one film before 1930.

- select name, SUM(length) from movie, movieExec where producerC# = cert# GROUP BY name HAVING MIN(year) < 1930

List studios who have at least 4 stars in all the movies the studio has made.

- select studioname from movie, starsin where title = movietitle AND year = movieyear GROUP BY studioname HAVING COUNT(\*) > 4

List studios who have at least 4 distinct stars in all the movies the studio has made.

- select studioname from movie, starsin where title = movietitle AND year = movieyear GROUP BY

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studioName HAVING COUNT(DISTINCT starName) > 4
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