**SQL Programming Homework 1**

**EECS 495**

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1. SELECT MOVIE

FROM APPEARED\_IN

WHERE STAR = 'Edward Norton'

Result:

# MOVIE

'Fight Club'

'The Illusionist'

'The Incredible Hulk'

1. Select distinct STAR

FROM appeared\_in

where Star <> 'Brad Pitt' and movie in (select movie

from appeared\_in

where star='Brad Pitt')

Result:

# STAR

'Edward Norton'

'Angelina Jolie'

'George Clooney'

'Matt Damon'

'Vincent Cassel'

1. select sum(HOW\_MUCH) as total

from made\_money m

where m.movie in (select distinct a.movie

from appeared\_in a, appeared\_in b

where a.star = 'Tom Hanks' and b.star='Rita Wilson' and a.movie=b.movie)

Result:

# total

'51444736.00'

1. select star

from in\_couple

where star <> 'Ben Affleck' and couple\_num in (select a.COUPLE\_NUM from divorced, in\_couple a

where a.COUPLE\_NUM = divorced.COUPLE\_NUM and a.star = 'Ben Affleck')

Result:

# star

'Jennifer Garner'

1. select star

from in\_couple

where couple\_num in (select married.couple\_num

from married, divorced

where married.day = divorced.day)

Result:

# star

'Angelina Jolie'

'Brad Pitt'

create view STAR\_MARRIED\_TIME as

select a.star as p1, b.star as p2, a.COUPLE\_NUM, married.DAY

from in\_couple a, in\_couple b, married

where a.COUPLE\_NUM = married.COUPLE\_NUM and a.couple\_num = b.couple\_num and a.star>b.star;

create view STAR\_MOVIE\_TIME as

select c.star as p1, d.star as p2, made\_money.DAY\_OPENED

from appeared\_in c, appeared\_in d, made\_money

where c.Movie = d.Movie and made\_money.movie = c.movie and c.star>d.star;

create view S\_Married as

select p1,p2,min(day) as married\_day

from STAR\_married\_TIME

group by p1,p2;

create view S\_Movie as

select p1,p2,min(day\_opened) as movie\_day

from STAR\_MOVIE\_TIME

group by p1,p2;

select p1,p2

from S\_married natural join S\_movie

where married\_day>movie\_day;

drop view star\_married\_time,star\_movie\_time, S\_married, S\_movie;

Result:

# p1, p2

'Brad Pitt', 'Angelina Jolie'

'Jennifer Garner', 'Ben Affleck'

'Tom Hanks', 'Rita Wilson'

'Vincent Cassel', 'Monica Bellucci'

1. select star

from appeared\_in

group by star

having count(movie) >= all(select count(movie)

from appeared\_in

group by star)

Result:

# star

'Brad Pitt'

'Matt Damon'

'Tom Hanks'

1. select a.star, b.star

from in\_couple a, in\_couple b

where a.star>b.star and a.couple\_num = b.couple\_num

group by a.star

having count(a.star)>1

Result:

# star, star

'Brad Pitt', 'Angelina Jolie'

'Tom Hanks', 'Rita Wilson'

1. select star

from in\_couple,divorced

where in\_couple.couple\_num = divorced.COUPLE\_NUM

group by star

having count(\*)>1

Result:

# star

'Angelina Jolie'

'Brad Pitt'

'Tom Hanks'

1. select star

from appeared\_in, made\_money

where appeared\_in.movie = made\_money.movie

group by star

having avg(HOW\_MUCH) >= all (select avg(how\_much)

from appeared\_in, made\_money

where appeared\_in.movie = made\_money.movie

group by star)

Result:

# star

'Scarlett Johansson'

1. create view m\_d\_time as

select couple\_num, married.day as md, divorced.day as dd

from married left outer join divorced using(couple\_num);

create view Star\_md as

select m\_d\_time.couple\_num, a.star as star, md, dd

from m\_d\_time, in\_couple a

where m\_d\_time.COUPLE\_NUM = a.COUPLE\_NUM;

create view income\_list as

select star, HOW\_MUCH, DAY\_OPENED

from appeared\_in,made\_money

where appeared\_in.movie = made\_money.movie;

create view income as

select couple\_num, Star\_md.star, md, dd, HOW\_MUCH, DAY\_OPENED

from Star\_md, income\_list

where star\_md.star = income\_list.star and DAY\_OPENED>md and (DAY\_OPENED<dd or dd is null);

create view dis as

select \*

from income

group by couple\_num,DAY\_OPENED;

create view result as

select couple\_num,avg(how\_much) as avg\_income

from dis

group by couple\_num;

select a.star as star1, b.star as star2

from in\_couple a, in\_couple b, result

where a.COUPLE\_NUM = b.COUPLE\_NUM and result.COUPLE\_NUM=a.COUPLE\_NUM and a.star>b.star and avg\_income >= ALL

(select avg\_income

from in\_couple a, in\_couple b, result

where a.COUPLE\_NUM = b.COUPLE\_NUM and result.COUPLE\_NUM=a.COUPLE\_NUM and a.star>b.star);

drop view m\_d\_time, star\_md, income\_list, income, dis, result;

Result:

# star1, star2

'Scarlett Johansson', 'Ryan Reynolds'