

Obligatorisk oppgave 3
Nicklas M. Hamang
INF1300
h2012
Gruppe 5.
Nicklash

sorry så mange innleveringer hadde litt problemer med å laste inn oppg 3a på skole pcen
Del1:
oppg 1.

```
Create table station(  
stasjonsID int primary key,  
snavn      varchar(32),  
lengdegrad double precision,  
breddegrad double precision,  
  
unique(lengdegrad, breddegrad, snavn)  
  
);
```

```
Create table måling(  
stasjonsID int,  
mtype      varchar(8),  
tidspunkt  timestamp,  
verdi      real,  
  
primary key (stasjonsID, mtype, tidspunkt),  
foreign key (stasjonsID) references stasjon (stasjonsID)  
);
```

```
Create table abbonnement(  
stasjonsID int,  
mtype      varchar(8),  
knavn      varchar(20),  
mobilnr    int,  
starttid   timestamp,  
sluttid    timestamp,  
  
primary key (stasjonsID, mtype, knavn)  
);
```

Oppg 4.

```
select distinct stasjonsID, snavn  
from stasjon  
where(snavn='OSLO');
```

oppg 5.

```
select s.stasjonsID, m.snavn
```

```

from stasjon s, måling m
where (m.mtype = 'HH' or m.mtype = 'HM' or m.mtype = 'HL')
and s.stasjonsID = m.stasjonsID
order by stasjonsID;

```

Oppg 7.

```

select a.stasjonsID, s.snavn, count(*)
from abonnement a, stasjon s
where (a.stasjonsID = s.stasjonsID)
group by a.stasjonsID, s.snavn;

```

oppg 8.

```

select stasjonsID
from abonnement
where (mtype = 'SS_24');

```

del 2:

Oppg 2a.

```

select f.title, f.prodyear, count(*)
from filmparticipation fp, person p, film f
where fp.parttype = 'director'
and p.lastname = 'Breien'
and p.firstname = 'Anja'
and fp.personid = p.personid
and fp.filmid = f.filmid
group by f.title, f.prodyear
order by f.prodyear;

```

| title | prodyear | count |
|-------------------------------|----------|-------|
| 17. mai - En film om ritualer | 1969 | 1 |
| Dager fra 1000 år | 1970 | 1 |
| Voldtekt | 1971 | 1 |
| Hustruer | 1975 | 1 |
| Allvarsamma leken, Den | 1977 | 1 |
| Arven | 1979 | 1 |
| Forfølgelsen | 1981 | 1 |
| Hustruer - ti år etter | 1985 | 1 |
| Papirfuglen | 1985 | 1 |
| Smykketyven | 1990 | 1 |
| Hustruer III | 1996 | 1 |

| | | | | |
|----------------------|--|------|--|---|
| Solvorn | | 1997 | | 1 |
| Å se en båt med seil | | 2000 | | 1 |
| Uten tittel | | 2005 | | 1 |

(14 rows)

oppg 2b.

```
select distinct f.title, f.prodyear, p.firstname, p.lastname
from filmparticipation fp, film f, filmitem fi, person p
where fp.parttype = 'director'
and fi.filmtype = 'TV'
and fp.personid = p.personid
and fp.filmid = f.filmid
and f.filmid = fi.filmid
order by f.prodyear;
```

får en feilmeld.

oppg 2c.

```
select fg.genre, count(*) as kinofilmer, round(((count(*)*100/(select count(*)*1.0 from filmgenre)),2)
as prosent
from filmgenre fg, filmitem fi
where fi.filmtype = 'C'
and fg.filmid = fi.filmid
group by genre
order by prosent;
```

| genre | kinofilmer | prosent |
|------------|------------|---------|
| Game-Show | 8 | 0.00 |
| Reality-TV | 17 | 0.00 |
| Talk-Show | 5 | 0.00 |
| Film-Noir | 439 | 0.06 |
| News | 393 | 0.06 |
| Sport | 1686 | 0.25 |
| Biography | 2048 | 0.30 |
| History | 2063 | 0.30 |
| Music | 2800 | 0.41 |
| Sci-Fi | 4662 | 0.68 |
| War | 4893 | 0.72 |
| Mystery | 5488 | 0.81 |
| Fantasy | 5667 | 0.83 |
| Musical | 7221 | 1.06 |
| Adult | 7271 | 1.07 |
| Horror | 8681 | 1.27 |
| Adventure | 9052 | 1.33 |
| Western | 9435 | 1.38 |
| Family | 9721 | 1.43 |
| Crime | 12397 | 1.82 |

| | | | | |
|-------------|--|--------|--|-------|
| Thriller | | 12709 | | 1.86 |
| Game-Show | | 8 | | 0.00 |
| Reality-TV | | 17 | | 0.00 |
| Talk-Show | | 5 | | 0.00 |
| Film-Noir | | 439 | | 0.06 |
| News | | 393 | | 0.06 |
| Sport | | 1686 | | 0.25 |
| Biography | | 2048 | | 0.30 |
| History | | 2063 | | 0.30 |
| Music | | 2800 | | 0.41 |
| Sci-Fi | | 4662 | | 0.68 |
| War | | 4893 | | 0.72 |
| Mystery | | 5488 | | 0.81 |
| Fantasy | | 5667 | | 0.83 |
| Musical | | 7221 | | 1.06 |
| Adult | | 7271 | | 1.07 |
| Horror | | 8681 | | 1.27 |
| Adventure | | 9052 | | 1.33 |
| Western | | 9435 | | 1.38 |
| Family | | 9721 | | 1.43 |
| Crime | | 12397 | | 1.82 |
| Thriller | | 12709 | | 1.86 |
| Action | | 15487 | | 2.27 |
| Romance | | 17287 | | 2.54 |
| Animation | | 17681 | | 2.59 |
| Documentary | | 43626 | | 6.40 |
| Comedy | | 70088 | | 10.28 |
| Drama | | 89019 | | 13.06 |
| Short | | 127233 | | 18.66 |

(28 rows)

Opppg 2e.

```
drop view deltatt;
create view deltatt as (
    select distinct personid, count(distinct filmid) as filmcount from filmparticipation
    where parttype like 'director' or parttype like 'cast'
    group by personid
);
```

```
drop view spillt;
create view spillt as (
    select distinct personid, count(distinct filmid) as actcount from filmparticipation
    where parttype like 'cast'
    group by personid
);
```

```

drop view regissor;
create view regissor as (
    select distinct personid, count(distinct filmid) as dircount from filmparticipation
    where parttype like 'director'
    group by personid
);

select p.firstname, p.lastname from person p,
(
    select a.personid from person p, deltatt r, spillt a
    where
        a.personid = r.personid and
        p.personid = a.personid and
        a.actcount = r.filmcount and
        a.personid in
        (
            select p.personid from regissor d, person p
            where
                p.personid = d.personid and
                p.gender like 'M' and
                d.dircount >= 20
        )
) regi
where
    p.personid = regi.personid
order by p.lastname
;

```

| firstname | lastname |
|-------------|-------------|
| Joan | Barril |
| Shaun | Bay |
| Trace | Beaulieu |
| Andreu | Buenafuente |
| Charles | Chaplin |
| Maurice | Costello |
| Dillon | Day |
| Fred | Evans |
| William S. | Hart |
| Neal | Hart |
| Jesús | Hermida |
| Steve | Holmes |
| Joel | Joan |
| Arthur V. | Johnson |
| Emilio | Manzano |
| Tony | Martin |
| Christopher | McCulloch |

| | | |
|-------------|--|-----------|
| Mick | | Molloy |
| Ferran | | Monegal |
| Kevin | | Murphy |
| Harry | | Myers |
| Elith Nulle | | Nykjær |
| Ramon | | Pellicer |
| Søren Ryge | | Petersen |
| Wallace | | Reid |
| Tony | | Ribas |
| E.Z. | | Ryder |
| Wolf | | Schmidt |
| Steve | | Smith |
| Toni | | Soler |
| Al | | St. John |
| Vicenç | | Villatoro |
| Darren | | Walsh |
| Dave | | Willis |

(34 rows)

3a.
kommer på slutten.

| | | | |
|----------|--------|--------------------|-------|
| Oppg 3b. | | | |
| lege | tester | testet av | tropp |
| | lege 1 | tropp 2 | |
| | lege 2 | tropp 1 | |
| | lege 3 | tropp 3 | |
| | | | |
| lege | for | med | tropp |
| | lege 1 | tropp 1 | |
| | lege 2 | tropp 2 | |
| | lege 3 | tropp 3 | |

Oppg 3c.

Vi kan gjøre dette ved å bruke ekvivalente stier.

Oppg 3d.

```
/******  
* PostgreSQL Database Description File for oppg 3a  
* Generated by stORM © Norsync AS 2008  
* Generation Date is 2012/11/2  
* Model Number is 1  
* Version Checksum is 47821  
*****/
```

```
/******  
* Table Definitions  
*****/
```

```
CREATE TABLE By (  
  Navn_Paa          VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Hus (  
  hus_nr_Til        VARCHAR(20) NOT NULL,  
  serie_nr_Til       VARCHAR(20) NOT NULL,  
  Tlf_nr_Til        VARCHAR(20) NOT NULL,  
  Navn_Med          VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Journalist_Avis (  
  Person_Id_For     VARCHAR(20) NOT NULL,  
  Avis_Med          VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Journalist_Radio (  
  Person_Id_For     VARCHAR(20) NOT NULL,  
  Radio_Med         VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Journalist_TV (  
  Person_Id_For     VARCHAR(20) NOT NULL,  
  TV_Med            VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Katogori (  
  Farge_paa         VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Kort (  
  ID_nr_Til         VARCHAR(20) NOT NULL  
);
```

```
CREATE TABLE Laptop (  
  serie_nr_Til       VARCHAR(20) NOT NULL  
);
```



```
CREATE TABLE Lege (
  Person_Id_Til      VARCHAR(20) NOT NULL,
  Tropp_nr_Med       VARCHAR(20),
  Tropp_nr_testet_av VARCHAR(20)
);
```

```
CREATE TABLE Nasjon (
  Nasjon_ID_NIL      VARCHAR(20) NOT NULL
);
```

```
CREATE TABLE Person (
  Person_Id_Til      VARCHAR(20) NOT NULL,
  ID_nr_Til          VARCHAR(20) NOT NULL,
  Bilde_av           VARCHAR(20) NOT NULL,
  Farge_Til          VARCHAR(20) NOT NULL,
  Kjoenn_Til         VARCHAR(20) NOT NULL,
  Navn_Paa           VARCHAR(20) NOT NULL,
  Tropp_nr_Med       VARCHAR(20) NOT NULL,
  f#_dato_Til        VARCHAR(20) NOT NULL
);
```

```
CREATE TABLE Rom (
  Adresse_Til        VARCHAR(20) NOT NULL,
  rom_nr_Til         VARCHAR(20) NOT NULL,
  serie_nr_Til       VARCHAR(20) NOT NULL,
  Person_Id_I        VARCHAR(20) NOT NULL,
  Tlf_nr_Til         VARCHAR(20) NOT NULL,
  hus_nr_med         VARCHAR(20) NOT NULL,
  Tropp_nr_Med       VARCHAR(20) NOT NULL
);
```

```
CREATE TABLE Tlf (
  Tlf_nr_Til         VARCHAR(20) NOT NULL
);
```

```
CREATE TABLE Tropp (
  Tropp_nr_Til       VARCHAR(20) NOT NULL,
  Nasjon_ID_for      VARCHAR(20)
);
```

```

/*****
* SERIAL columns
*****/
```

```

/*****
* Primary and Unique Key Definitions
```

*****/

ALTER TABLE By ADD PRIMARY KEY (Navn_Paa);

ALTER TABLE Hus ADD PRIMARY KEY (hus_nr_Til);

ALTER TABLE Hus ADD UNIQUE (serie_nr_Til);

ALTER TABLE Hus ADD UNIQUE (Tlf_nr_Til);

ALTER TABLE Journalist_Avis ADD PRIMARY KEY (Person_Id_For,Avis_Med);

ALTER TABLE Journalist_Radio ADD PRIMARY KEY (Person_Id_For,Radio_Med);

ALTER TABLE Journalist_TV ADD PRIMARY KEY (Person_Id_For,TV_Med);

ALTER TABLE Katogori ADD PRIMARY KEY (Farge_paa);

ALTER TABLE Kort ADD PRIMARY KEY (ID_nr_Til);

ALTER TABLE Laptop ADD PRIMARY KEY (serie_nr_Til);

ALTER TABLE Lege ADD PRIMARY KEY (Person_Id_Til);

ALTER TABLE Nasjon ADD PRIMARY KEY (Nasjon_ID_NIL);

ALTER TABLE Person ADD PRIMARY KEY (Person_Id_Til);

ALTER TABLE Person ADD UNIQUE (ID_nr_Til);

ALTER TABLE Rom ADD PRIMARY KEY (Adresse_Til);

ALTER TABLE Rom ADD UNIQUE (rom_nr_Til);

ALTER TABLE Rom ADD UNIQUE (serie_nr_Til);

ALTER TABLE Rom ADD UNIQUE (Person_Id_I);

ALTER TABLE Rom ADD UNIQUE (Tlf_nr_Til);

ALTER TABLE Tlf ADD PRIMARY KEY (Tlf_nr_Til);

ALTER TABLE Tropp ADD PRIMARY KEY (Tropp_nr_Til);

/*****

* Foreign Key Constraints

*****/

```

ALTER TABLE Hus ADD CONSTRAINT Laptop_Hus
    FOREIGN KEY (serie_nr_Til) REFERENCES Laptop (serie_nr_Til);

ALTER TABLE Hus ADD CONSTRAINT Tlf_Hus
    FOREIGN KEY (Tlf_nr_Til) REFERENCES Tlf (Tlf_nr_Til);

ALTER TABLE Hus ADD CONSTRAINT By_Hus
    FOREIGN KEY (Navn_Med) REFERENCES By (Navn_Paa);

ALTER TABLE Journalist_Avis ADD CONSTRAINT Person_Journalist_Avis
    FOREIGN KEY (Person_Id_For) REFERENCES Person (Person_Id_Til);

ALTER TABLE Journalist_Radio ADD CONSTRAINT Person_Journalist_Radio
    FOREIGN KEY (Person_Id_For) REFERENCES Person (Person_Id_Til);

ALTER TABLE Journalist_TV ADD CONSTRAINT Person_Journalist_TV
    FOREIGN KEY (Person_Id_For) REFERENCES Person (Person_Id_Til);

ALTER TABLE Lege ADD CONSTRAINT Person_Lege
    FOREIGN KEY (Person_Id_Til) REFERENCES Person (Person_Id_Til);

ALTER TABLE Lege ADD CONSTRAINT Tropp_Lege
    FOREIGN KEY (Tropp_nr_Med) REFERENCES Tropp (Tropp_nr_Til);

ALTER TABLE Rom ADD CONSTRAINT Tropp_Rom
    FOREIGN KEY (Tropp_nr_Med) REFERENCES Tropp (Tropp_nr_Til);

ALTER TABLE Lege ADD CONSTRAINT Tropp_Lege1
    FOREIGN KEY (Tropp_nr_testet_av) REFERENCES Tropp (Tropp_nr_Til);

ALTER TABLE Person ADD CONSTRAINT Katogori_Person
    FOREIGN KEY (Farge_Til) REFERENCES Katogori (Farge_paa);

ALTER TABLE Person ADD CONSTRAINT Tropp_Person
    FOREIGN KEY (Tropp_nr_Med) REFERENCES Tropp (Tropp_nr_Til);

ALTER TABLE Rom ADD CONSTRAINT Laptop_Rom
    FOREIGN KEY (serie_nr_Til) REFERENCES Laptop (serie_nr_Til);

ALTER TABLE Rom ADD CONSTRAINT Tlf_Rom
    FOREIGN KEY (Tlf_nr_Til) REFERENCES Tlf (Tlf_nr_Til);

ALTER TABLE Rom ADD CONSTRAINT Hus_Rom
    FOREIGN KEY (hus_nr_med) REFERENCES Hus (hus_nr_Til);

```

```

/*****
* Index Definitions
*****/

```

```

CREATE INDEX By_Hus ON          Hus (Navn_Med);

CREATE INDEX Person_Journalist_Avis ON    Journalist_Avis (Person_Id_For);

CREATE INDEX Person_Journalist_Radio ON   Journalist_Radio (Person_Id_For);

CREATE INDEX Person_Journalist_TV ON     Journalist_TV (Person_Id_For);

CREATE INDEX Tropp_Lege ON             Lege (Tropp_nr_Med);

CREATE INDEX Tropp_Lege1 ON            Lege (Tropp_nr_testet_av);

CREATE INDEX Exclud_1 ON              Lege (Tropp_nr_testet_av,Person_Id_Til);

CREATE INDEX Exclud_1_A ON            Lege (Tropp_nr_Med,Person_Id_Til);

CREATE INDEX Katogori_Person ON        Person (Farge_Til);

CREATE INDEX Tropp_Person ON          Person (Tropp_nr_Med);

CREATE INDEX Tropp_Rom ON             Rom (Tropp_nr_Med);

CREATE INDEX Hus_Rom ON              Rom (hus_nr_med);

CREATE INDEX TotalEq_1 ON            Tropp (Nasjon_ID_for);

/* UNSUPPORTED CONSTRAINT: Referential Exclude "Exclud_1" */

/* UNSUPPORTED CONSTRAINT: Referential Equal "TotalEq_1" */

```

3e.
rakk ikke gjøre den

3a.



