Øving 4

Oppgave 1a)

```
SELECT *
FROM ordrehode
NATURAL JOIN
Ordredetalj
WHERE ordrehode.levnr = 44;
```

Oppgave 1b)

```
SELECT levinfo.navn, levinfo.levby
FROM levinfo
WHERE levinfo.levnr
IN
(
SELECT prisinfo.levnr
FROM prisinfo
WHERE prisinfo.delnr = 1
)
```

Oppgave 1c)

```
SELECT levnr, navn
from levinfo
NATURAL JOIN
prisinfo
WHERE delnr = 201
and pris
in (
        SELECT
        min(pris)
        from prisinfo
        WHERE delnr = 201
)
```

Oppgave 1d)

```
SELECT ordrenr, dato, delnr, beskrivelse, kvantum, pris as enhetspris, kvantum * pris
AS total_pris
FROM ordrehode
NATURAL JOIN ordredetalj
NATURAL JOIN delinfo
NATURAL JOIN prisinfo
WHERE ordrenr = 16
```

Oppgave 1e)

```
SELECT prisinfo.delnr, prisinfo.levnr
FROM prisinfo
WHERE pris > (
        SELECT prisinfo.pris
        FROM prisinfo
        WHERE prisinfo.katalognr = "X7770")
```

Oppgave 1fi)

```
DROP TABLE IF EXISTS levinfoUtenFylke;
CREATE TABLE levinfoUtenFylke like levinfo;
INSERT levinfoUtenFylke SELECT * FROM levinfo;
ALTER TABLE levinfoUtenFylke DROP COLUMN fylke;
SELECT * FROM levinfoUtenFylke
```

```
DROP TABLE IF EXISTS byFylke;
CREATE TABLE byFylke(
        levby VARCHAR(30) NOT NULL,
        fylke VARCHAR(30) NOT NULL,
        PRIMARY KEY (levby)
);

INSERT INTO byFylke
SELECT DISTINCT levby, fylke
FROM levinfo;

SELECT * FROM byFylke;
```

Oppgave 1fii)

```
DROP VIEW IF EXISTS fView;

CREATE VIEW fView AS
SELECT levnr, navn, adresse, levby, fylke, postnr
FROM levinfoUtenFylke
NATURAL JOIN byFylke;

SELECT * FROM fView;
DELETE FROM fView WHERE levnr = 44;
INSERT INTO fView VALUES(99, "Miss office As", "TesteGata 8", "TestBy", "TestFylke",
9909)
```

Vi kan lese fra viewet, men det fungerer ikke å verken legge til eller slette elementer

Oppgave 1g)

```
SELECT levby FROM levinfo
WHERE levby not in(
        SELECT levby
        FROM levinfo
        WHERE levnr IN(
                SELECT levnr FROM prisinfo
        )
)
```

Oppgave 1h)

```
DROP VIEW IF EXISTS orderView;
DROP VIEW IF EXISTS deliverableView;
DROP VIEW IF EXISTS infoView;
DROP VIEW IF EXISTS canDeliverView;

CREATE VIEW orderView AS
SELECT ordredetalj.ordrenr, ordredetalj.delnr, ordredetalj.kvantum FROM ordredetalj
WHERE ordredetalj.ordrenr = 18;

SELECT * FROM orderView;

SELECT orderView.delnr from orderView;

CREATE VIEW deliverableView AS
SELECT prisinfo.levnr, prisinfo.delnr, prisinfo.pris FROM prisinfo WHERE prisinfo.delnr
IN (SELECT orderView.delnr FROM orderView);

SELECT * FROM deliverableView;

CREATE VIEW infoView AS
SELECT *,  kvantum * pris  AS total_pris FROM orderView
NATURAL JOIN
deliverableView;

CREATE VIEW canDeliverView AS
SELECT * FROM infoView where levnr IN
(SELECT levnr FROM infoView GROUP BY levnr HAVING COUNT(*) > 1);

SELECT * FROM canDeliverView;

SELECT levnr, MIN(Pris) FROM (
SELECT ordrenr, levnr, SUM(total_pris) as Pris
FROM canDeliverView
```

```
GROUP BY levnr
) AS T
```

Oppgave 2a)

```
SELECT * FROM forlag
WHERE forlag.telefon like '2%'
UNION
SELECT * FROM forlag
WHERE forlag.telefon not like '2%' or forlag.telefon IS NULL
```

Oppgave 2b)

```
DROP VIEW IF EXISTS ageView;

CREATE VIEW ageView AS
SELECT *, ifnull(dod_aar, YEAR(CURRENT_DATE())) - fode_aar AS alder FROM
forfatter
WHERE fode_aar IS NOT NULL AND IF(dod_aar IS NULL, fode_aar > 1900, true);

SELECT * FROM ageView;

SELECT AVG(alder) as Gjennomsnittsalder from ageView;
```

Oppgave 2c)

```
SELECT (SELECT COUNT(*) FROM ageView)
/
(
        SELECT (
                SELECT COUNT(*) FROM ageView
                )
        +
        (SELECT COUNT(*) FROM forfatter
        WHERE forfatter.forfatter_id NOT IN(
                SELECT forfatter_id from ageView
)));
```