Plenary

AnsNr	Fornavn	Etternavn	Adresse	PostNr	Fødselsdato	Kjønn	Stilling	Årslønn
1	Georg	Barth	Kringsjågrenda 3F	3841	1978-10-20	M	Lagerleder	526000.00
2	Gunnlaug	Angeltveit	Langmyrgrenda 9	3800	1965-03-29	K	Markedssjef	559300.00
3	Morgan	Dalland	Jansbergveien 19	3830	1970-01-10	M	Innkjøper	583000.00
6	Vilde	Aksnes	Minister Ditleffs vei 44	3810	1973-10-11	K	Databaseadministrator	602800.00
7	Henriette	Brobakken	Stubberud Sognsvann 1	3800	1967-10-01	K	Daglig leder	725000.00
8	Synøve	Bakketun	Vassøyveien 7	3840	1981-05-15	K	Kundebehandler	450500.00
9	Ragnvald	Allum	Utsikten 4	3812	1988-03-07	M	Kundebehandler	421500.00
11	Oliver	Abrahamsen	Tarjei Vesaas'' vei 3A	3812	1985-01-20	M	Lagermedarbeider	406000.00
13	Oda	Cappelen	Norheimskneiken 12	3800	1987-02-28	K	Produktutvikler	567900.00
16	Andrine	Ebbesen	Kristianias gate 9	3800	1984-12-27	K	Regnskapssekretær	462900.00
17	Karl Anton	Hoff	Furustia 3	3840	1993-08-03	M	Kundebehandler	410700.00
18	Johanna	Li	Krogsteinveien 101A	3841	1992-05-17	K	Kundebehandler	416200.00

SELECT

SELECT	Hvilke kolonner skal med?
FROM	Fra hvilke tabeller?
WHERE	Hvilke rader skal med?
GROUP BY	Gruppere på hvilke kolonner?
HAVING	Hvilke grupper skal med?
ORDER BY	Sortere på hvilke kolonner?

GROUP BY changes functions

- Count, avg and more do their operations on each group!!!

Warning messages

```
mysql> select stilling/2 from ansatt;
```

```
+-----------+
| stilling/2 |
+-----------+
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
|         0 |
+-----------+
12 rows in set, 12 warnings (0.00 sec)
```

```
mysql> show warnings;
+---------+------+---------------------------------------------------------+
| Level   | Code | Message                                                 |
+---------+------+---------------------------------------------------------+
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Lagerleder'          |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Markedssjef'         |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Innkjøper'           |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Databaseadministrator' |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Daglig leder'        |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Kundebehandler'      |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Kundebehandler'      |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Lagermedarbeider'    |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Produktutvikler'     |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Regnskapssekretær'   |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Kundebehandler'      |
| Warning | 1292 | Truncated incorrect DOUBLE value: 'Kundebehandler'      |
+---------+------+---------------------------------------------------------+
```

Create and manage users

- CREATE USER 'username' IDENTIFIED BY '*password*';

- GRANT type_of_permission ON database_name.table_name TO 'username';

  - ALL PRIVILEGES
  - CREATE
  - DROP-
  - DELETE-
  - INSERT-
  - SELECT-
  - UPDATE
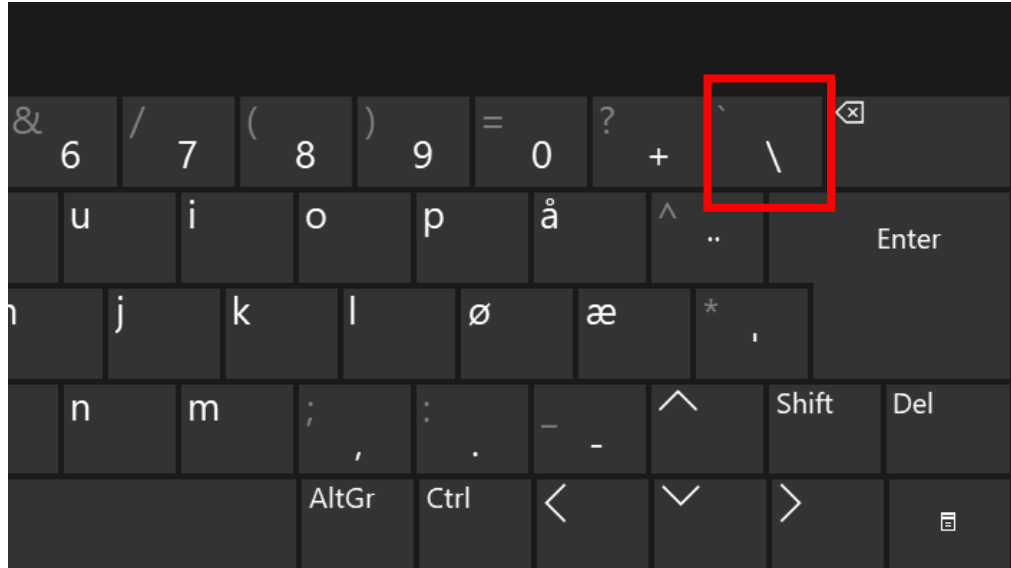 - GRANT OPTION-

Table names and column names with spaces

- Can be done, but needs to be marked by `

- On windows
  - Shift +
- Shift + alt +
- Backslash (7)


```
CREATE DATABASE `spaced name`
(`col 1` INT,col2 INT,col3 CHAR(1))
```

File types

csvfile.csv	12.02.2018 06.40	Microsoft Excel Co...
imagefile.PNG	12.02.2018 07.09	PNG File
pythonfile.py	12.02.2018 07.08	PY File
sqlfile.sql	12.02.2018 06.42	SQL File
textfile.txt	12.02.2018 06.39	Text Document
This is a pdf file.pdf	12.02.2018 06.42	Chrome HTML Do...
This is a word file.docx	12.02.2018 06.38	Microsoft Word D...

Address	Value
A45	11
A46	12
A47	200
A...	...
Ann	

How to read these?
Letters, numbers or
something else??

Plain text files

- Contain no text formatting!!!
  - .txt
  - .csv
  - .py
  - .sql
  - .m
  - ++++++ many more

Computer does not care about how the text looks as long as it makes sense to it

this is a .txt file, it contains no formatting code

VS.

This is a word file, it contains code which changes how the text is displayed.

CSV files

- Table data stored in a plain text file
    - Columns seperated by a symbol (often comma)

Importing csv files

```sql
LOAD DATA LOCAL INFILE 'newdata.csv' INTO TABLE anewtable2
COLUMNS TERMINATED BY ';'
LINES TERMINATED BY '\n'
(col1,col2,col3);
```