

pip3 install --user psycopg2-binary ?

psql -h dbpg-ifi-kurs01 -U brukernavn\_priv -d brukernavn -f webshop.sql

psql -h dbpg-ifi-kurs01 -U brukernavn\_priv -d brukernavn -f data.sql

hvor du erstatter **brukernavn** med ditt UiO-brukernavn.  
Databaseskjemaet **ws** inneholder nå følgende tabeller:

**ws.categories**(cid, name)

**ws.products**(pid, name, price, cid, description)

**ws.users**(uid, username, password, name, address)

**ws.orders**(oid, uid, pid, num, date, payed)

- hvor ws.products(cid) refererer til ws.categories(cid) og sier hvilken kategori et produkt tilhører.
- ws.orders(uid) refererer til ws.users(uid) og ws.orders(pid) refererer til ws.products(pid).
- Altså, ws.orders inneholder bestillinger for en bruker gitt ved uid på et produkt gitt ved pid, hvor num er antall produkter bestilt, date er datoen for bestillingen, og payed har verdien 0 dersom bestillingen ikke ennå er betalt, og verdien 1 dersom bestillingen er betalt.

Første

installer: **pip3 install --user psycopg2-binary**

Så

: Dersom du velger Python må programmene du skriver kjøres med Python 3.

Dette gjøres på følgende måte i terminalen: **python3 administrator.py**

```
lfi Workstation
Options  Connect USB Device  Send Ctrl-Alt-Delete
Activities  Places  Terminal
Nov 16 13:21
~/M-drive/IN2090/Oblig4/administrator/python
File Edit View Search Terminal Help
Remember to save everything in ~/M-drive!
[...]$ cd IN2090
[...]$ cd Oblig4
[...]$ cd administrator
[...trator]$ cd python
[...]$ pip3 install --user psycpg2-binary
Collecting psycpg2-binary
  Downloading psycpg2-binary-2.9.2-cp38-cp38-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (3.0 MB)
    |...| 3.0 MB 7.6 MB/s
Installing collected packages: psycpg2-binary
Successfully installed psycpg2-binary-2.9.2
WARNING: You are using pip version 21.2.4; however, version 21.3.1 is available.
You should consider upgrading via the '/opt/lfi/anaconda3/bin/python -m pip install --upgrade pip' command.
[...]$ py administrator.py
bash: py: command not found...
^C
[...]$ python3 administrator.py
-- ADMINISTRATOR --
Please choose an option:
 1. Create bills
 2. Insert new product
 3. Exit
Option: 
```

```
[...]$ psql -h dbpg-lfi-kurs01 -d [...]
Password for user parisara_priv:
psql (10.17, server 11.14)
WARNING: psql major version 10, server major version 11.
         Some psql features might not work.
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bits: 256, compression: off)
Type "help" for help.
[...]\i webshop.sql
psql:webshop.sql:3: NOTICE: drop cascades to 4 other objects
DETAIL:  drop cascades to table ws.users
drop cascades to table ws.categories
drop cascades to table ws.products
drop cascades to table ws.orders
DROP SCHEMA
BEGIN
CREATE SCHEMA
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
COMMIT
```

```
[...]=> \i data.sql
BEGIN
INSERT 0 7
INSERT 0 4
INSERT 0 16
INSERT 0 30
COMMIT
[...]=> \dt ws.*
          List of relations
Schema |      Name      | Type  | Owner
-----+-----+-----+-----
ws     | categories     | table | 
ws     | orders         | table | 
ws     | products       | table | 
ws     | users          | table | 
(4 rows)
```

```
=> select* from ws.users;
```

| uid | username  | password   | name             | address                               |
|-----|-----------|------------|------------------|---------------------------------------|
| 1   | yunoboy12 | secretpass | Carl Smith       | Streetroad 34, 1234 Townplace         |
| 2   | hackzor   | pass1234   | Mary Sagan       | Placestreet 12B, 4356 Nicetown        |
| 3   | comprin88 | p4ssw0rd   | Ann Pat          | Firstroad 341, 8965 Hitown            |
| 4   | qwer12    | terces     | Mina Polar       | Streetroad 2, 1234 Townplace          |
| 5   | mark4     | mpass      | Mark Green       | Commonplace Road 34, 2234 Commonplace |
| 6   | mirz      | asdf9876   | Amir Nazur       | Higarden Road 98, 7762 Hitown         |
| 7   | manaman   | abc123     | Mirnaruth Pulary | Snooth rd 74, 5646 Hitown             |

(7 rows)

```
=> select* from ws.products;
```

| pid | name                        | price | cid | description                   |
|-----|-----------------------------|-------|-----|-------------------------------|
| 1   | Piffi                       | 3.9   | 1   | A spice mix                   |
| 2   | Star Fights 3               | 15.39 | 4   | A space simulator             |
| 3   | Socks                       | 8.99  | 3   | A pair of socks               |
| 4   | Thinkpad L420               | 199   | 2   | A nice student laptop         |
| 5   | Blue sweather               | 15.99 | 3   | A blue woolen sweater         |
| 6   | Milk                        | 2.5   | 1   | Fresh cow milk                |
| 7   | Denim pants                 | 29.99 | 3   | A pair of blue denim pants    |
| 8   | Nintendo 64                 | 69.95 | 2   | The original Nintendo 64 with |
| 9   | Nario Sledge                | 14.45 | 4   | A sledge racing game          |
| 10  | Squires of the New Monarchy | 9.95  | 4   | A Sci-Fi RPG                  |
| 11  | Nanana                      | 0.9   | 1   | A yellow fruit                |
| 12  | Gameboy Color               | 45    | 2   | A vintage gameboy with color  |
| 13  | Realm of Battle Skill       | 19.95 | 4   | An MMORPG                     |
| 14  | IPad S6                     | 379.9 | 2   | A userfriendly pad            |
| 15  | Green sweather              | 15.99 | 3   | A green woolen sweater        |
| 16  | Bread                       | 5     | 1   | A freshly baked bread         |

(16 rows)

```
[REDACTED]> select* from ws.orders;
```

| oid | uid | pid | num | date       | payed |
|-----|-----|-----|-----|------------|-------|
| 1   | 6   | 12  | 2   | 2021-10-29 | 0     |
| 2   | 5   | 14  | 3   | 2021-09-27 | 0     |
| 3   | 1   | 8   | 2   | 2021-09-21 | 1     |
| 4   | 2   | 9   | 1   | 2021-11-03 | 1     |
| 5   | 6   | 7   | 1   | 2021-10-20 | 0     |
| 6   | 4   | 11  | 1   | 2021-11-06 | 0     |
| 7   | 6   | 15  | 1   | 2021-09-28 | 0     |
| 8   | 4   | 3   | 3   | 2021-10-14 | 1     |
| 9   | 2   | 7   | 1   | 2021-08-09 | 1     |
| 10  | 6   | 4   | 1   | 2021-10-28 | 0     |
| 11  | 3   | 16  | 2   | 2021-09-11 | 0     |
| 12  | 7   | 3   | 3   | 2021-10-21 | 0     |
| 13  | 4   | 1   | 1   | 2021-09-02 | 0     |
| 14  | 2   | 4   | 1   | 2021-11-10 | 0     |
| 15  | 3   | 5   | 4   | 2021-10-08 | 0     |
| 16  | 7   | 3   | 1   | 2021-10-09 | 0     |
| 17  | 6   | 13  | 1   | 2021-09-21 | 0     |
| 18  | 4   | 9   | 1   | 2021-10-04 | 1     |
| 19  | 6   | 15  | 2   | 2021-08-21 | 1     |
| 20  | 2   | 1   | 3   | 2021-08-16 | 0     |
| 21  | 3   | 4   | 1   | 2021-10-15 | 0     |
| 22  | 5   | 4   | 2   | 2021-11-07 | 0     |
| 23  | 1   | 15  | 1   | 2021-10-12 | 0     |
| 24  | 6   | 14  | 4   | 2021-10-19 | 0     |
| 25  | 6   | 1   | 1   | 2021-09-24 | 1     |
| 26  | 6   | 13  | 4   | 2021-09-10 | 1     |
| 27  | 1   | 1   | 4   | 2021-10-09 | 0     |
| 28  | 4   | 16  | 1   | 2021-10-23 | 0     |
| 29  | 2   | 5   | 4   | 2021-09-26 | 1     |
| 30  | 4   | 4   | 1   | 2021-10-06 | 0     |

(30 rows)