Data Modelling and Databases II
Assignment 1

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The process of moving the database

1. Firstly we install postgresql and mongodb

2. Assign the password and user in postgresql

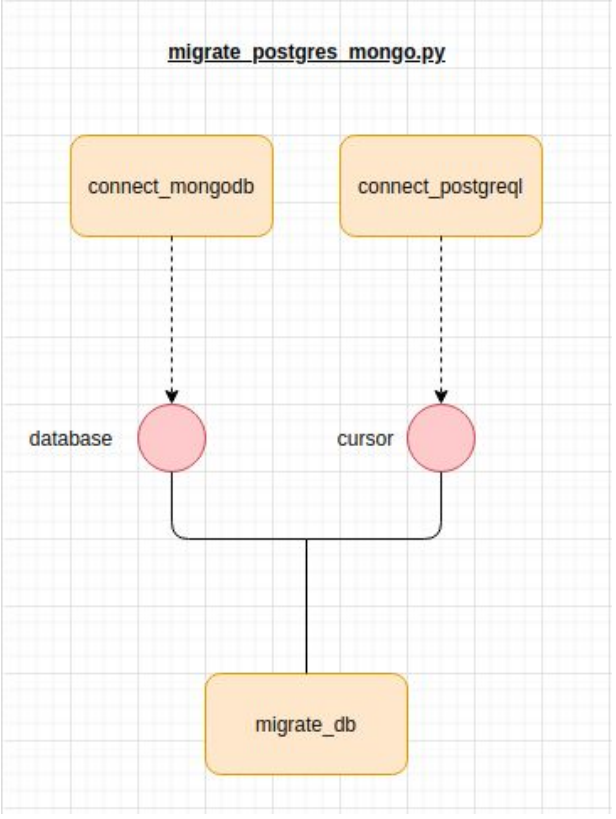
   user will be `postgres`
   password will be `luck`

   assign the password for this user
   `sudo passwd postgres`
   `luck`

3. Import database to postgresql
   `psql -U postgres -h localhost -p 5432 -d dvdrental -f "...\restore.sql"`

4. Run mongodb
   `sudo service mongod start`

5. Run file with migration database
   `python3 migrate_postgres_mongo.py`



Descriptions of the adjustments that were necessary for the new database.

In the postgresql our database stored like a set of tables. When we migrate data from postgresql to mongodb, we convert each row of tables to json objects without loss of data.

Comments on the performance of the queries.

Query 1

- Run the query using terminal command
  `python3 query_1.py`

- query return terminal output with list of target customers

Query 2

- Run the query using terminal command
  `python3 query_2.py`

- query return table in the file `query_2.csv`

Query 3

- Run the query using terminal command
  `python3 query_3.py`

- query return table in the file `query_3.csv`

Query 4

- Metric (any) to assess to which degree a movie is a good recommendation in our case will be based on count of films which intersected in set of current customer and another customer. If count of intersects films > 33% then other films of another customer will recommended to current customer.

- Run the query using terminal command
  `python3 query_4.py`

- query return table in the file `query_4.csv`

Query 5

- Run the query using terminal command
  `python3 query_5.py`

- query return table in the file `query_5.csv`