VE472 Lab3

Installation of sqlite

Very Easy, even for Windows :). But recommend to install it in WSL if you are using windows.

Download Dataset

From the server, `imdb.tar`. For detail of this dataset, see [IMDb Non-Commercial Datasets](#).

Some Useful Commands with SQLite

```
.mode column
.headers on
.table
.schema [table name]
```

Basic Data Selection using SQLite3

For basic sql language grammars, I refer to

[Aggregate and Aggregate Statistical - Apache Drill](#)

Apache Drill which is another powerful sql handle application developed in Java which you will learn later.

A reminder is that not all tsv files are required to finish the job here.

Some guidelines to help you finish the lab

The oldest movie

Which table consists information about whether something is "movie" or some other things?

How would you consider to represent "OLDEST"?

Basic Syntax of select statements with filter and order:

```
SELECT [] FROM [] WHERE [CONDITION] ORDER BY [] ....
```

The longest movie in 2009

The result of a select statement is another table that can be selected from.

The year with the most movies

How to handle empty values in sqlite?

How to "count" the number of items in sqlite?

The name of the person who contains in the most movies & The principal crew of the movie with highest average ratings and more than 500 votes

SQL | Join (Inner, Left, Right and Full Joins) - GeeksforGeeks For different types of join

You may need use `[table].[field]` to specify if the field are repeated in both tables to join.

The count of each Pair<BirthYear, DeathYear> of the people

See SQL | GROUP BY - GeeksforGeeks for group by

How will you define a valid pair?

Lab2 Remaining part

the one providing ip should do

```
echo 1 > /proc/sys/net/ipv4/ip_forward
echo "1" > /proc/sys/net/ipv4/ip_dynaddr
iptables -P INPUT ACCEPT
iptables -P OUTPUT ACCEPT
iptables -P FORWARD ACCEPT
IFACE_NET="replace with internet interface (eg. wlan0)"
IFACE_LAN="replace with private net interface (the interfac connected to the switch
eg. eth0)"
$IPTABLES -t nat -A POSTROUTING -o $IFACE_NET -j MASQUERADE
```

note: this will "disable" the firewall

and allow transition of packets

then install `dnsmasq`

(this is a light dhcp server)

this will depend how the system is setup, so it's hard to provide clear guidance here...

```
systemctl restart dnsmasq
```

the one providing dhcp will also need to setup a fix ip for that `IFACE_LAN` interface

in `/etc/dnsmasq.conf` search for interface and write the same as for `IFACE_LAN`