

## COMP1835

### Lab 3\_extra/optional. Working with Redis database

#### Converting JSON into Redis hash and loading mass data

##### Lab 3.9 Convert JASON into Redis Hash (map)

The below JSON document

```
{
  "colour": "blue",
  "make": "bmw",
  "model": {
    "trim": "aero",
    "name": "x3"
  },
  "features": [ "powerlocks", "moonroof" ]
}
```

can be converted into a Redis hash with the following HSET commands for each pair:

```
> HSET car1 colour blue
> HSET car1 make bmw
> HSET car1 model.trim aero
> HSET car1 model.name x3
> HSET car1 features[0] powerlocks
> HSET car1 features[1] moonroof
> HGETALL car1
```

```
127.0.0.1:6379> HSET car1 colour blue
(integer) 1
127.0.0.1:6379> HSET car1 make bmw
(integer) 1
127.0.0.1:6379> HSET car1 model.trim aero
(integer) 1
127.0.0.1:6379> HSET car1 features[0] powerlocks
(integer) 1
127.0.0.1:6379> HSET car1 features[10] moonroof
(integer) 1
127.0.0.1:6379> HGETALL car1
1) "colour"
2) "blue"
3) "make"
4) "bmw"
5) "model.trim"
6) "aero"
7) "features[0]"
8) "powerlocks"
9) "features[10]"
10) "moonroof"
127.0.0.1:6379> █
```

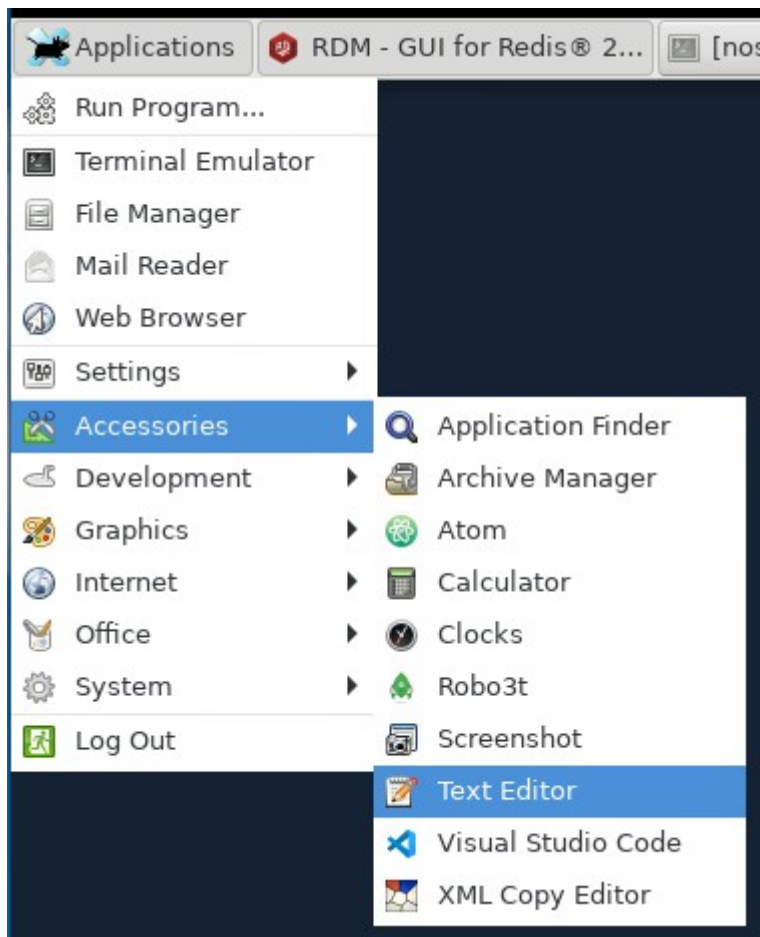
### Lab 3.10 Loading large data set.

In 2.6 or later versions of Redis the redis-cli utility supports a new mode called pipe mode that was designed in order to perform mass insertion.

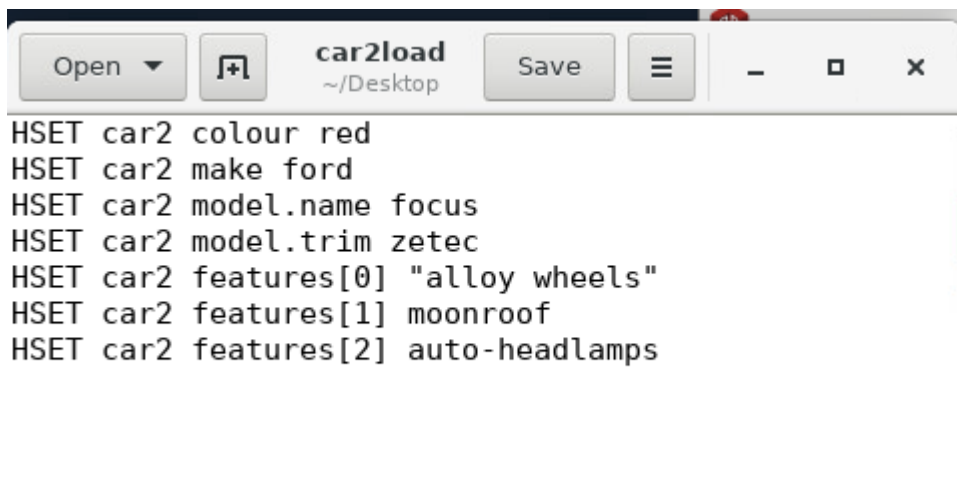
First you need to create a text file with multiple SET commands, or HSET, or others for each key, hash, list, etc.

Then you will use the terminal command: **cat file\_name | redis-cli --pipe**

Open Text Editor



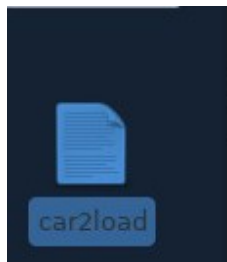
Create file with any number of SET or HSET commands, for example:



Save it on the Desktop as a text file, called **car2load**

Then open terminal on the Desktop and run the following command:

**cat car2load | redis-cli --pipe**



```
[nosql@nosql Desktop]$ cat car2load | redis-cli --pipe
All data transferred. Waiting for the last reply...
Last reply received from server.
errors: 0, replies: 7
[nosql@nosql Desktop]$
```

To check that the values have been inserted, you can use HGETALL car2 or navigate to Redis Desktop Manager interface and refresh your connection:

Local::db0::car2 ✖

<b>HASH:</b>	car2	Rename k...	TTL:-1	Delete
row	key	value	+ Add Row	
1	colour	red	Delete row	
2	make	ford	Reload Value	
3	model.name	focus	Search on page...	
4	model.trim	zetec	Full Search	
5	features[0]	alloy wheels	Page 1 of 1	
6	features[1]	moonroof	Size: 7	
7	features[2]	auto-headlamps	< >	