

## Excercises

1. Start a CouchDB container and set it up as a single node DB
2. Create a database, logs
3. Create a script/program that is able to send custom log messages to the database. The idea is that other scripts / tools you use can use your program to send special log messages based on their activity, such as whenever scaling activities are performed, or when backup has been run. One example of such a log file could be:

```
{
  «type» : «INFO»,
  «host» : «backup»,
  «message» : «Backup started»,
  «date» : «...»
}
or
{
  «type» : «ERROR»,
  «host» : «db1»,
  «message» : «Database detected as not running, restarting»,
  «date» : «...»
}
```

The script could function like this:

```
couchlogger.py -t ERROR -m «Database detected as not running, restarting»
```

( Hint: the hostname can be fetched from a environment variable, but could also be an option)

4. Create views in CouchDB, that would display the log messages based on INFO,ERROR and FATAL  
( Hint: In the emit function, you can emit the whole doc as the value)
5. Create another tool, that would display all messages for a particular host on the command line.  
Can you add an option that would specify the type of message?
6. Can you suggest other «metavariables» that would be interesting to add to the log document?