# Python Incubator track – Mongo DB

## Concept Understanding

Create a fully working address book storing the data into a Mongo Database.

Each entry in the address book needs to be represented by a Document in the Mongo DB.

An address book entry needs to contain the following:

* + First Name
  + Last Name
  + Email address (not mandatory, should not be stored in the document if omitted)
  + Home and Work phone numbers (Either of them are not mandatory fields)

The program needs to have the following functionalities:

1. Use a DB named ‘incubator’ and a collection with the name of your choice
2. Within the Python code, create 4 functions:
   1. insert\_new\_entry(<dictionary of the document to insert>)
      * This function takes a dictionary as input and stores it into the DB
   2. update\_entry(<firstname>,<lastname>,<dictionary of the new values to update>)
      * This function takes the first name and last name of the document to modify and a dictionary of the values to update
      * Note : For the sake of this exercice, we don’t allow multiple people with identical names
   3. display\_entries(firstname=None,lastname=None)
      * This function displays all matching records for the first name and last name provided.
      * Example: When searching for ‘Jim’, it should return entries such as:
        1. Jimmy
        2. Jim
        3. Jimbo
        4. …
      * If both firstname and lastname are None, then the function should display all entries in alphabetical order (based on lastname)
   4. delete\_entries(firstname=None,lastname=None)
      * This function should delete all documents matching the firstname and lastname (Same as above, if multiple matches, delete multiple entries)

## Troubleshooting

The following piece of code (Mongo-Troubleshooting.py) is a valid python script (it contains no syntax errors), however it has the following problems:

* Database does not start
* IP address of the VeryImportantRouter is not updated correctly
* Displaying only the important routers does not work

How can those be fixed in the most efficient way?