Assignment 2

→ **Aim :**

Install and configure client and server for MySQL and MongoDB (Show all commands and neccessary steps for install-ation and configuration)

→ **Problem Statement :**

Installation & configuration of client & server for :
- MySQL (RDBMS)
- Mongo DB (NO SQL)

→ **Objective :**

1] To study installation & configuration of MySQL database.
2] To study installion & configuration of MongoDB
3] To analyze difference between RDBMS & NoSQL Installation & Configuration

→ **Theory :**

A] Installation of MySQL

1. First, remove the current version of MySQL you're already using.

$ sudo apt-get purge mysql-client-core- 5.5

2. Now, to install MySQL, run the following commands from a terminal prompt:

$ sudo apt-get install mysql-server
$ sudo apt-get install mysql-client.

3. During the installation process you will be prompted to enter a password for MySQL root user.

4. Once the installation is complete, the MySQL server should start automatically. You can run the following command ~~from command~~ from a terminal prompt to check whether the MySQL server is running:

$ sudo netstat -tap | grep mysql

* When you run the above command, you should see the following line or something similar:

tcp   0   0 localhost:localhostdomain:
    mysql   *:* LISTEN -

* If the server is not running correctly, you can type the following command to start it:

$ sudo /etc/init.d/mysql restart

* You can edit the /etc/mysql/my.cnf file to configure basic settings: log file, port number, etc..

B] Installation of MongoDB :

- 1. Importing the Public Key

a. In this step, we will import the MongoDB GPG public key.

b. MongoDB is already included in the Ubuntu package repository, but the unofficial MongoDB repository provides the most up-to-date version and is the recommended way of installing the software. Ubuntu ensures the authenticity of software packages by verifying that they are signed with GPG keys, so we first have to import the key for the official MongoDB repository.

c. Execute :
$ sudo -E apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 7F0CEB10

d. After successful importing of keys you will see :

Output

gpg: Total number processed: 1
gpg: imported: 1 (RSA: 1)

2. Creating a List File

a. Next, we have to add the MongoDB repository details so APT will know where to download the packages from.

b. Issue the following command to create a list file for MongoDB.

```
$ echo "deb http://repo.mongodb.org/
apt/ubuntu $(lsb_release -sc)/
mongodb-org/3.0 multiverse" |
sudo tee /etc/apt/sources.list.d/
mongodb-org-3.0.list
```

c. After adding the repository details, we need to update the package list.

```
$ sudo apt-get update
```

3. Installing and Verifying MongoDB.

a. Now, we can install the MongoDB package itself.

```
$ sudo apt-get install -y mongodb-org.
```

a. This command will install several packages containing the latest stable version of MongoDB along with helpful management tools for the MongoDB server.

b. After the package installation MongoDB will be automatically started. You can check this by running the following command.

```
$ sudo service mongod status
$ sudo service mongod start
```

* If MongoDB is running, you'll see an output like this (with a different process ID)

mongod start/running, process 1611

→ Conclusion :

1] Study of installation steps on client server & MySQL & MongoDB

2] Study of configuration of MySQL & MongoDB.

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