**Assignment – 1 [Group: A]**

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**Title: Install and configure Client and server for mysql and mongodb (show all commands and necessary stepes for installation and configuration.)**

**Subject: DBMS**

**Batch: T1**

**Roll no: 06**

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**Install MongoDB on Ubuntu 16.04**

1. Step 1 - Importing the Public Key. GPG keys of the software distributor are required by the Ubuntu package manager apt (Advanced Package Tool) to ensure package consistency and authenticity. ...
2. Step 2 - Create source list file MongoDB. ...
3. Step 3 - Update the repository. ...
4. Step 4 - Install MongoDB.

## Install MongoDB on Ubuntu 16.04

### Step 1 - Importing the Public Key

GPG keys of the software distributor are required by the Ubuntu package manager apt (Advanced Package Tool) to ensure package consistency and authenticity. Run this command to import MongoDB keys to your server.

sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv EA312927

### Step 2 - Create source list file MongoDB

Create a MongoDB list file in /etc/apt/sources.list.d/ with this command:

echo "deb http://repo.mongodb.org/apt/ubuntu "$(lsb\_release -sc)"/mongodb-org/3.2 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org-3.2.list

### Step 3 - Update the repository

update the repository with the apt command:

sudo apt-get update

### Step 4 - Install MongoDB

Now you can install MongoDB by typing this command:

sudo apt-get install -y mongodb-org

We have to create a new mongodb systemd service file in the '/lib/systemd/system' directory. Go to that directory and create the new mongodb service file 'mongod.service' with vim.

cd /lib/systemd/system/  
vim mongod.service

Paste script below:

[Unit]

Description=High-performance, schema-free document-oriented database

After=network.target

Documentation=https://docs.mongodb.org/manual

[Service]

User=mongodb

Group=mongodb

ExecStart=/usr/bin/mongod --quiet --config /etc/mongod.conf

[Install]

WantedBy=multi-user.target

Save the file and exit.

Now update the systemd service with command below:

systemctl daemon-reload

Start mongodb and add it as service to be started at boot time:

systemctl start mongod  
systemctl enable mongod

Now check that mongodb has been started on port 27017 with the netstat command.

netstat -plntu

## Configure MongoDB username and password

When the MongoDB packages are installed you can configure username and password for the database server:

### Step 1 - Open mongo shell

Before you set up a username and password for MongoDB, you need to open the mongodb shell on your server. You can login by typing:

mongo

If you get error Failed global initialization: BadValue Invalid or no user locale set. Please ensure LANG and/or LC\_\* environment variables are set correctly, try the command:

export LC\_ALL=C  
mongo

### Step 2 - Switch to the database admin

Once you`re in the MongoDB shell, switch to the database named admin:

use admin

### Step 3 - Create the root user

Create the root user with this command :

db.createUser({user:"admin", pwd:"admin123", roles:[{role:"root", db:"admin"}]})

Desc: Create user admin with password admin123 and have the permission/role as root and the database is admin.

Now type exit to exit from MongoDB shell.

### Step 4 - Enable mongodb authentication

Edit the mongodb service file '/lib/systemd/system/mongod.service' with your editor.

vim /lib/systemd/system/mongod.service

On the 'ExecStart' line 9, add the new option '--auth'.

ExecStart=/usr/bin/mongod --quiet --auth --config /etc/mongod.conf

Save and exit.

Reload the systemd service:

systemd daemon-reload

### Step 5 - Restart MongoDB and try to connect

Now restart MongoDB and connect with the user created.

sudo service mongod restart

and connect to the mongodb shell with this command:

mongo -u admin -p admin123 --authenticationDatabase admin

and you will see the output like this:

**Installation Steps for MySQL:**

**Reset the MySQL Root Password**

1. Stop the current MySQL server instance: sudo service mysql stop.
2. Use dpkg to re-run the configuration process that MySQL goes through on first installation. You will again be asked to set a root password. sudo dpkg-reconfigure mysql-server-5.5.
3. Then start MySQL: sudo service mysql start

## Step 1 — Installing MySQL

$ sudo apt-get update

$ sudo apt-get install mysql-server

### Installing MySQL 5.5 or 5.6

If you want to install MySQL 5.5 or 5.6 specifically, the process is still very straightforward. First, update the package index on your server.

sudo apt-get update

Then, to install MySQL 5.5, install the mysql-server-5.5 package.

sudo apt-get install mysql-server-5.5

To install MySQL 5.6, install the mysql-server-5.6 package instead.

sudo apt-get install mysql-server-5.6

$ mysql --version

$ sudo mysql\_install\_db

$ mysqladmin -p -u root version