Title:
Write a Program to Create, Manage and groups User accounts in own Cloud by Installing Administrative Features.

Objective:
To Create, Manage and groups User accounts in own Cloud by Installing Administrative Features
Software requirements:
Operating System(Linux,virtual linux operating system on windows)

Hardware Requirement:
Pentium IV system with latest configurations

Theory:

1.What is OwnCloud?
OwnCloud is a suite of client–server software for creating and using file hosting services. OwnCloud is functionally very similar to the widely used Drop box, with the primary functional difference being that the Server Edition of ownCloud is free and open-source, and thereby allowing anyone to install and operate it without charge on a private server. It also supports extensions that allow it to work like Google Drive, with online document editing, calendar and contact synchronization, and more. Its openness avoids enforced quotas on storage space or the number of connected clients, instead having hard limits (like on storage space or number of users) defined only by the physical capabilities of the server. The development of ownCloud was announced in January 2010, in order to provide a free software replacement to proprietary storage service providers. The company was founded in 2011 and forked the code away from KDE to github.

2.Design:
For desktop machines to synchronize files with their ownCloud server, desktop clients are available for PCs running Windows, macOS, FreeBSD or Linux. Mobile clients exist for iOS and Android devices. Files and other data (such as calendars, contacts or bookmarks) can also be accessed, managed, and uploaded using a web browser without any additional software. Any updates to the file system are pushed to all computers and mobile devices connected to a user's account.Encryption of files may be enforced by the server administratorThe ownCloud server is written in the PHP and JavaScript scripting languages. For remote access, it employs sabre/dav, an open-source WebDAV server.

OwnCloud is designed to work with several database management systems, including SQLite, MariaDB, MySQL, Oracle Database, and PostgreSQL.

3. Features:-

ownCloud files are stored in conventional directory structures, and can be accessed via WebDAV if necessary. User files are encrypted both at rest and during transit. ownCloud can synchronise with local clients running Windows (Windows XP, Vista, 7 and 8), macOS (10.6 or later), or various Linux distributions.

ownCloud users can manage calendars (CalDAV), contacts (CardDAV) scheduled tasks and streaming media (Ampache) from within the platform.

From the administration perspective, ownCloud permits user and group administration (via OpenID or LDAP). Content can be shared by defining granular read/write permissions between users and/or groups. Alternatively, ownCloud users can create public URLs when sharing files. Logging of file-related actions is available in the Enterprise and Education service offerings.

Furthermore, users can interact with the browser-based ODF-format word processor, bookmarking service, URL shortening suite, gallery, RSS feed reader and document viewer tools from within ownCloud. For additional extensibility, ownCloud can be augmented with "one-click" applications and connection to Dropbox, Google Drive and Amazon S3.

All ownCloud clients (Desktop, iOS, Android) support the OAuth 2 standard for Client Authentication.

4. Enterprise Features:-

For Enterprise customers, ownCloud GmbH offers apps with additional functionality. They are mainly useful for large organizations with more than 500 users. An Enterprise subscription includes support services. Commercial features include End-to-end encryption, Ransomware and Antivirus protection, Branding, Document Classification, Single-Sign-On via Shibboleth/SAML, and a lot more.[16] Distribution:- ownCloud server and clients may be downloaded from the ownCloud website and from thirdparty repositories, such as Google Play and Apple iTunes, and repositories maintained by Linux distributions. In 2014, a dispute arose between ownCloud and Ubuntu regarding the latter allegedly neglecting maintenance of packages, resulting in the temporary removal of ownCloud from the Ubuntu repository. ownCloud has been integrated with the GNOME desktop. Additional projects that use or link to ownCloud include a Raspberry Pi project to create a cloud storage system using the Raspberry Pi's small, low-energy form-factor.

5. Installation and configuration of own Cloud

For steps can refer: https://www.linode.com/docs/applications/cloud- storage/install-and-configure-owncloud-on-ubuntu-16-04/#create-an- administrator-account

Step1: Open Terminal and type:-

1. sudo apt update && sudo apt upgrade
2.sudo wget -nv https://download.owncloud.org/download/repositories/9.1/Ubuntu_16.04/Release.key -O Release.key
3.sudo apt-key add - < Release.key
4.sudo sh -c "echo 'deb http://download.owncloud.org/download/repositories/9.1/Ubuntu_16.0 4/ /' > /etc/apt/sources.list.d/owncloud.list"
5.sudo apt update
6.sudo apt install owncloud

Step 2: Open another terminal :-Log in to your MySQL database, and enter your root password:

1.mysql -u root -p
2.password: root

Step 3:ENTER COMMAND: -Create a new database for ownCloud, and replace root with a new, secure password:

1.CREATE DATABASE ownCloud;
2.CREATE USER ownCloud@localhost;
3.SET PASSWORD FOR 'ownCloud'@'localhost' = PASSWORD('root');

Step 4:-Assign the new user to the database:

1.GRANT ALL PRIVILEGES ON ownCloud.* to ownCloud@localhost;
2.FLUSH PRIVILEGES;
3. exit

Step 5:-Log into MySQL as the newly created user:

mysql -u ownCloud -p
enter password :root

Step 6:-check the current user in MySQL using

SELECT current_user();

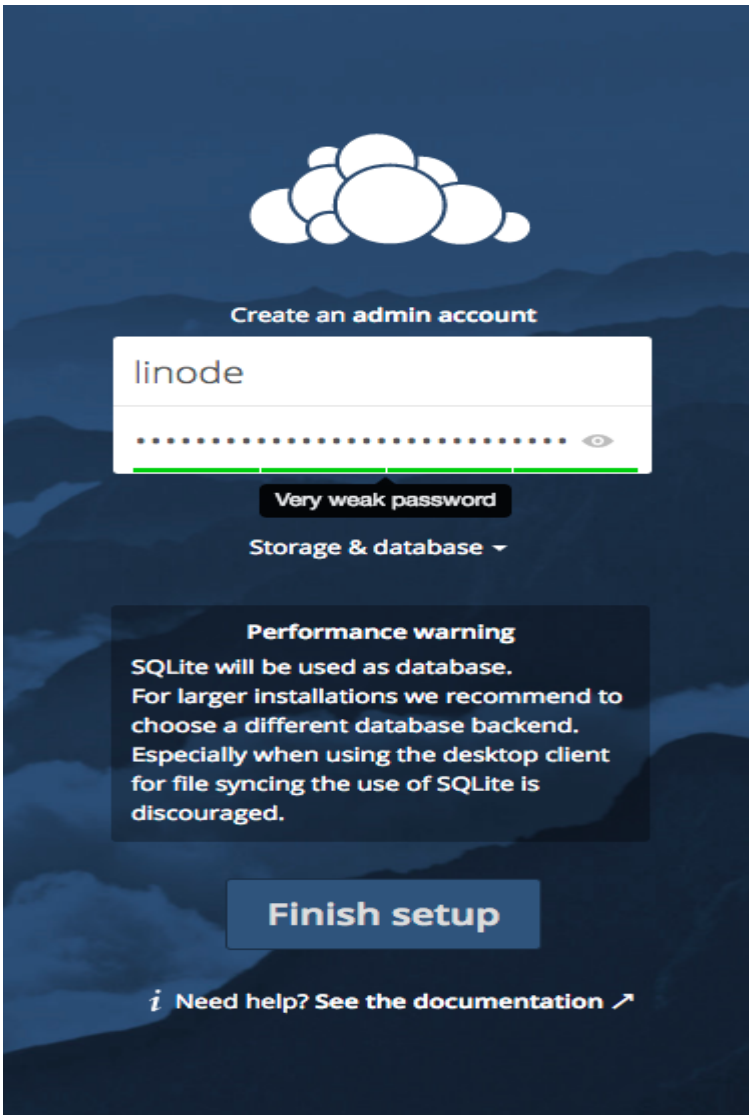
Step 7:-NOW OPEN YOUR BROWSER AND TYPE:-

localhost/owncloud

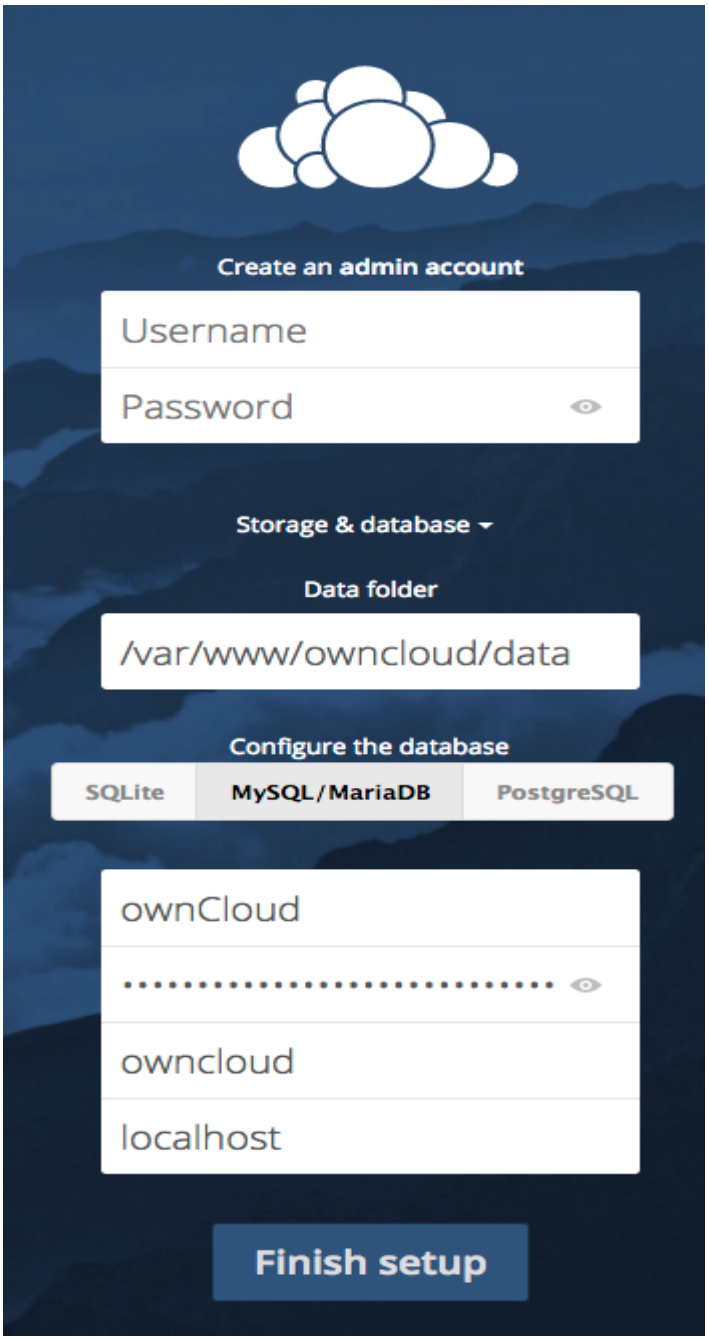
6.Create an Administrator Account

1.ENTER USERNAME

2.ENTER PASSWORD



3.Click **Storage & database** and enter the database login information:

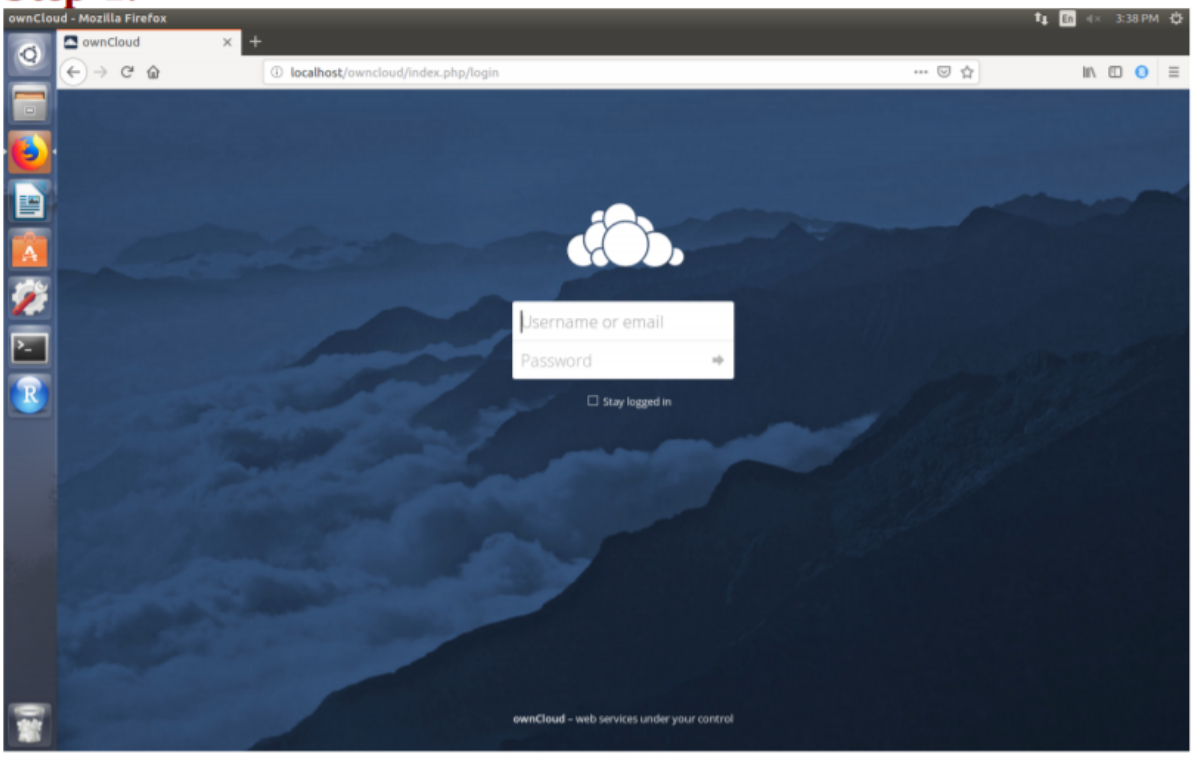


4.Welcome to ownCloud:

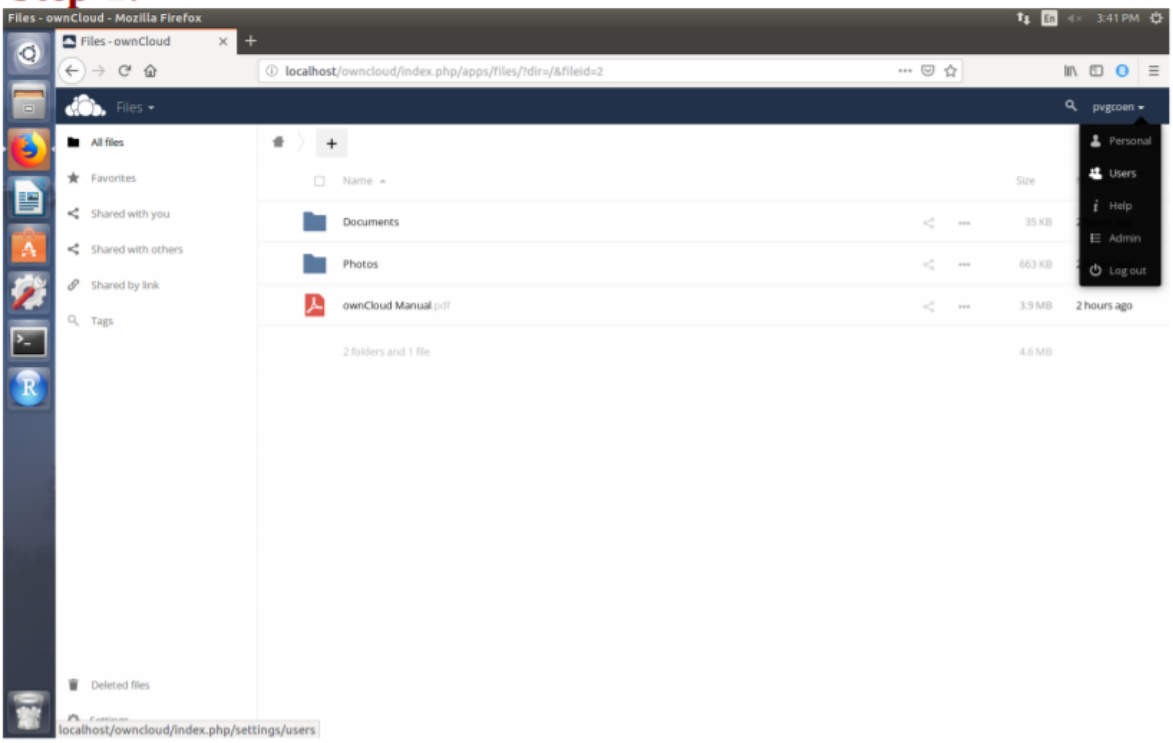
Files
All files
Favorites
Shared with you
Shared with others
Shared by link
Tags
Name
Size
Documents
35 KB
Photos
663 KB
ownCloud Manual.pdf
3.9 MB
2 folders and 1 file
4.5 MB

7.Create, Manage and groups User accounts in own Cloud by Installing Administrative Features

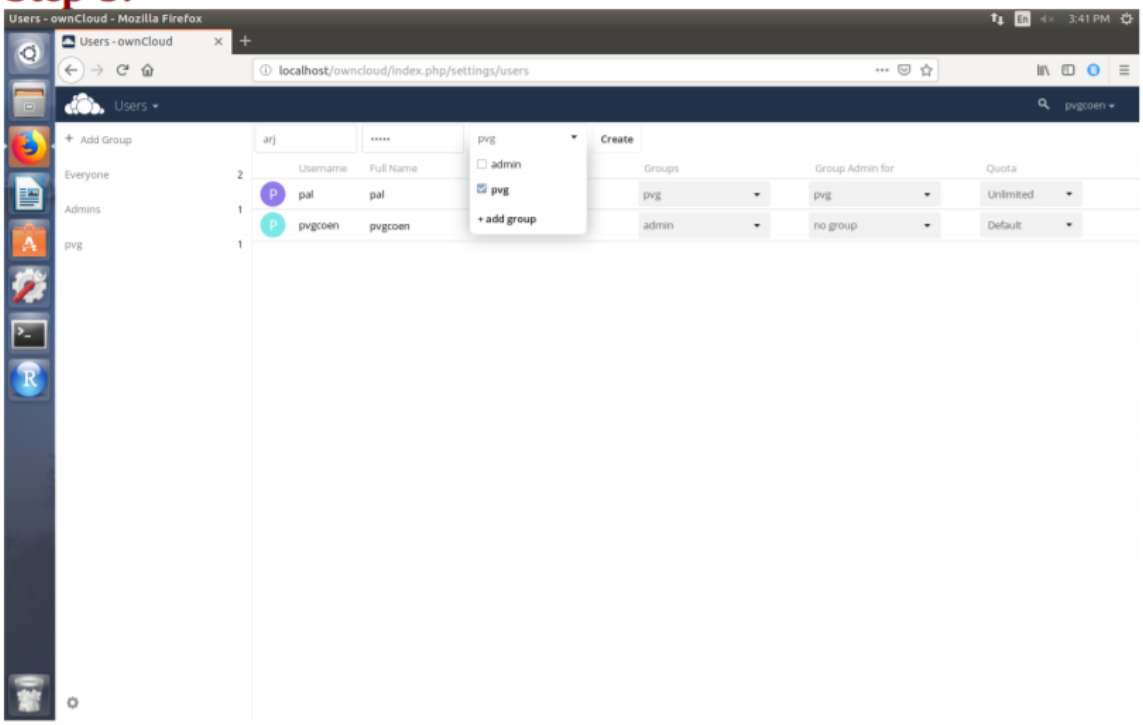
Step-1:



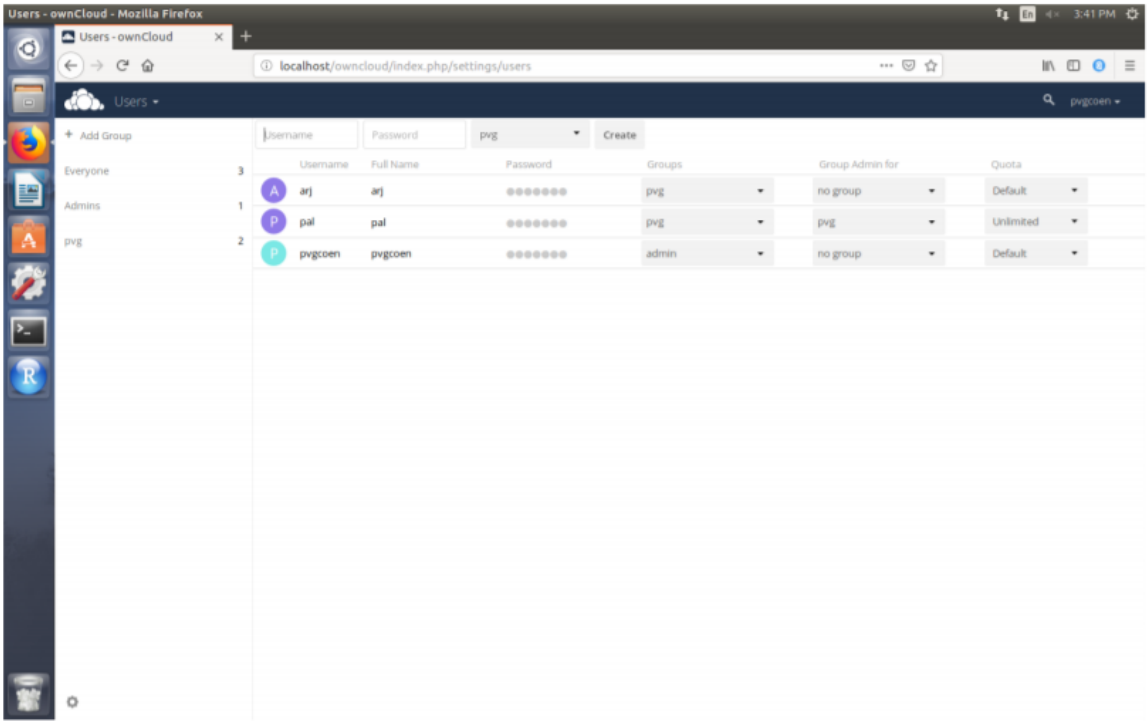
Step-2:


Files - ownCloud - Mozilla Firefox
3:41 PM
Files - ownCloud
localhost/owncloud/index.php/apps/files/?dir=/&fileid=2
Files
pvgcoen
All files
Favorites
Shared with you
Shared with others
Shared by link
Tags
Deleted files
Name
Size
Documents
35 KB
Photos
663 KB
ownCloud Manual.pdf
3.9 MB
2 hours ago
2 folders and 1 file
4.6 MB
Personal
Users
Help
Admin
Log out
localhost/owncloud/index.php/settings/users

Step-3:


Users - ownCloud - Mozilla Firefox
3:41 PM
Users - ownCloud
localhost/owncloud/index.php/settings/users
Users
pvgcoen
Add Group
Everyone 2
Admins 1
pvg 1
arj
pvg
Create
admin
pvg
+ add group
Username
Full Name
Groups
Group Admin for
Quota
pal
pal
pvg
pvg
Unlimited
pvgcoen
pvgcoen
admin
no group
Default

Step-4:



Conclusion:

Hence ,we have studied how to Create, Manage and groups User accounts in own Cloud by Installing Administrative Features.