

Task :

1. Jelaskan perbedaan IP Private & IP Public
2. Jelaskan perbedaan Client-to-server & Peer-to-peer
3. Jalankan nginx di server kalian
4. Cari 3 command shell yang belum di present dan berikan definisinya

1. IP public adalah alamat IP yang digunakan dalam jaringan global Internet, dimana penggunaan dan alokasinya diatur oleh IANA (Internet Assigned Numbers Authority) dan untuk kawasan Asia Pasifik dibawah APNIC (Asia-Pacific Network Information Centre).

IP Private adalah IP Address yang hanya dikenali di jaringan lokal-nya saja. Alamat IP dalam rentang ini dianggap tidak dapat dirutekan, karena tidak unik. IP ini hanya unik didalam jaringannya sendiri, bukan di jaringan Internet.

2. jaringan Client-Server adalah jaringan yang banyak digunakan. Di sini, Server adalah sistem yang kuat yang menyimpan data atau informasi di dalamnya. Di sisi lain, Klien adalah mesin yang memungkinkan pengguna mengakses data di server jarak jauh.

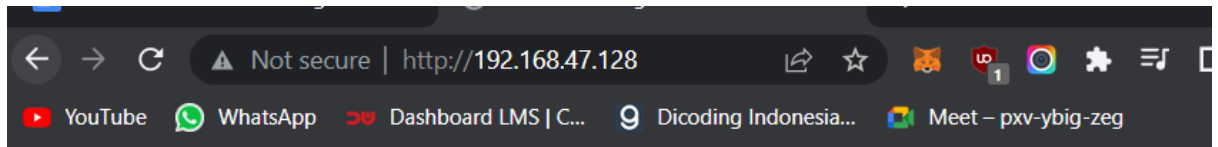
Tidak seperti Client-Server, jaringan Peer-to-Peer tidak membedakan antara klien dan server, tetapi setiap node dapat menjadi klien atau server tergantung pada apakah node tersebut meminta atau menyediakan layanan. Setiap node dianggap sebagai peer .

3.

```
johndy@johndy:~$ sudo service nginx status
• nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2023-01-11 01:48:23 UTC; 56min ago
     Docs: man:nginx(8)
  Main PID: 920 (nginx)
    Tasks: 3 (limit: 1029)
   Memory: 4.1M
   CGroup: /system.slice/nginx.service
           └─920 nginx: master process /usr/sbin/nginx -g daemon on; master_process on;
             └─921 nginx: worker process
               └─922 nginx: worker process

Jan 11 01:48:22 johndy systemd[1]: Starting A high performance web server and a reverse proxy server.
Jan 11 01:48:23 johndy systemd[1]: Started A high performance web server and a reverse proxy server.
lines 1-14/14 (END)
```

NGINX sudah berjalan di server



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

4. Command df

Berfungsi untuk melihat disk space yang tersedia di setiap partisi dalam sistem

Command locate

Berfungsi untuk melacak lokasi sebuah file dalam sistem

Command du

Berfungsi untuk melihat disk usage

Challenge

install node version manager dan jalankan nginx di Localtunnel

```
johndy@johndy:~$ curl https://raw.githubusercontent.com/creationix/nvm/master/install.sh | bash
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left   Speed
100 15916  100 15916    0     0 39690      0 --:--:-- --:--:-- --:--:-- 39690
=> Downloading nvm from git to '/home/johndy/.nvm'
=> Cloning into '/home/johndy/.nvm'...
remote: Enumerating objects: 358, done.
remote: Counting objects: 100% (358/358), done.
remote: Compressing objects: 100% (304/304), done.
remote: Total 358 (delta 41), reused 164 (delta 28), pack-reused 0
Receiving objects: 100% (358/358), 218.72 KiB | 7.81 MiB/s, done.
Resolving deltas: 100% (41/41), done.
* (HEAD detached at FETCH_HEAD)
   master
=> Compressing and cleaning up git repository

=> Appending nvm source string to /home/johndy/.bashrc
=> Appending bash_completion source string to /home/johndy/.bashrc
=> Close and reopen your terminal to start using nvm or run the following to use it now:

export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh" # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion" # This loads nvm bash_completion
```

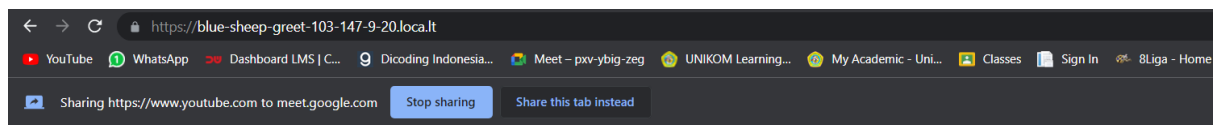
Disini saya menggunakan script untuk menginstall nvm

```
johndy@johndy:~$ exec bash
johndy@johndy:~$ nvm install 14
Downloading and installing node v14.21.2...
Downloading https://nodejs.org/dist/v14.21.2/node-v14.21.2-linux-x64.tar.xz...
##### 100.0%
Computing checksum with sha256sum
Checksums matched!
Now using node v14.21.2 (npm v6.14.17)
Creating default alias: default -> 14 (-> v14.21.2)
johndy@johndy:~$ node -v
v14.21.2
johndy@johndy:~$ npm -v
6.14.17
johndy@johndy:~$ npm install -g localtunnel
/home/johndy/.nvm/versions/node/v14.21.2/bin/lt -> /home/johndy/.nvm/versions/node/v14.21.2/lib/node
_modules/localtunnel/bin/lt.js
+ localtunnel@2.0.2
added 22 packages from 22 contributors in 22.103s
johndy@johndy:~$ _
```

Ini adalah proses penginstalan localtunnel

```
johndy@johndy:~$ lt --port 80
your url is: https://blue-sheep-greet-103-147-9-20.local.lt
```

Setelah ini cek di browser apakah localtunnel berhasil dirun



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Seperti yang dilihat nginx sudah berhasil berjalan di localtunnel