**— DAY 1 ASSIGNMENT —**

**LetsUpgrade Sugendhiran K “System Design: Zero to Hero”**

**Q1: Difference between PROXY and VPN. Which one is better for privacy protection? A1:**

VPNs (Virtual Private Network) and Proxy Servers both protect user identities and are great tools for accessing geo-restricted content.

| *VPN* | *PROXY* |
| --- | --- |

Protects all Internet Traffic. Protects only our Application / Browser. Encrypts Traffic**,** Hackers & Govt. can’t Track Doesn’t Encrypts Traffic.

Works on OS & Re-route all Traffic. Works on Certain Application / Browser. Slower, as need to encrypt data. Faster than VPNs.

Mostly PAID. Many are Available for FREE

More Reliable. Drops Frequently.

VPNs are better than Proxy, as they provide privacy & security by routing our traffic through secure servers & encrypts our traffic.

Whereas, Proxy simply passes your traffic through a mediating server but doesn’t necessary offer extra protection.

Also, we won’t require Proxy & VPN at the same time, as VPN Services offers similar & much more. ***So, VPNs are Superior to Proxy Server in many aspects, specially when it comes to Privacy & Security.***

**Q2: Can a Server act as a Client?**

**A1:**

Client: A client is a device or a program that requires services via the web. A client requests the server for content or service function

Server: A server is a device or a program that responds to the requests of the clients by providing services to them. Server provides functions or services to the clients when the client request for services. That is a difference between client and server.

There are many types of servers, including web servers, mail servers, and virtual servers. An individual system can provide resources and use them from another system at the same time. This means that a device could be both a server and a client at the same time.

Client can’t Work as a Server because it can’t host / store large amount of data, it can read data only from the server. Whereas, Server can act as Client. For e.g., FB can send Request to Google Servers.

***So, Yes Server can act as a Client.***