Task 8 — Working with VPNs

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# Objective

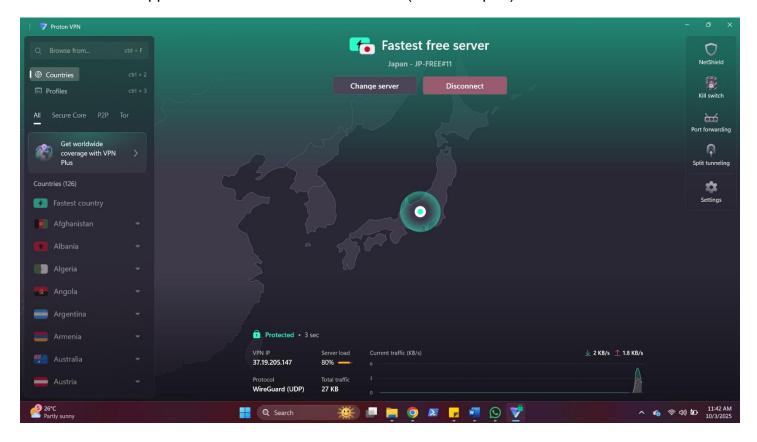
The objective of this task was to gain hands-on experience with a free VPN, understand its role in protecting privacy, encrypting communication, and compare browsing experience with and without a VPN.

#### **Tools Used**

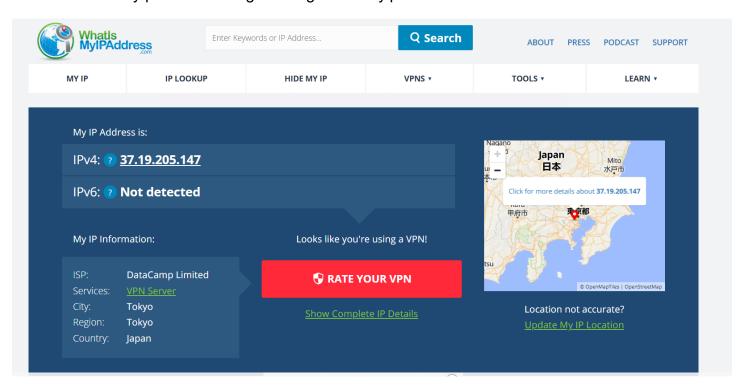
- ProtonVPN (Free Tier) client
- Web browser (Chrome)
- Website for IP verification: https://whatismyipaddress.com
- Optional: speed test website (fast.com or speedtest.net)

## **VPN Setup Steps**

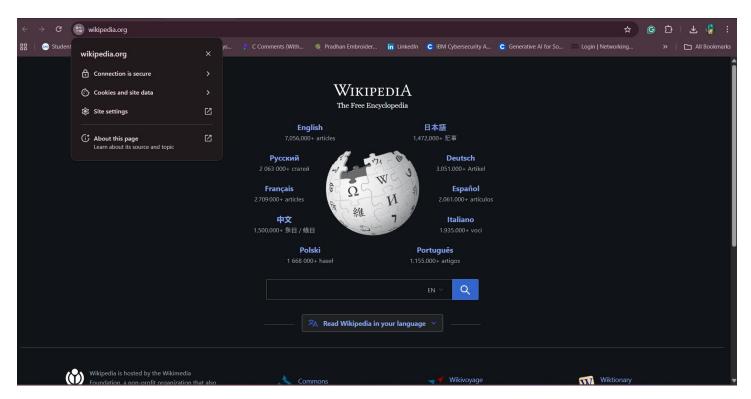
- 1. Created a free ProtonVPN account.
- 2. Installed ProtonVPN client on my system.
- 3. Launched the app and connected to a FREE server (server: Japan).



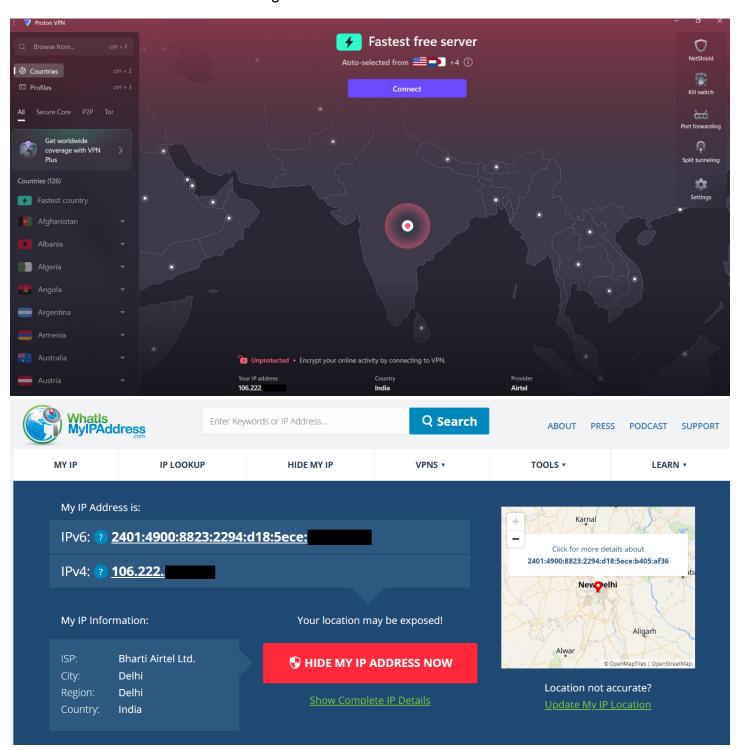
4. Verified that my public IP changed using whatismyipaddress.com.



5. Browsed HTTPS websites to confirm secure traffic.



#### 6. Disconnected VPN and verified original IP returned.



### **Observations**

- VPN successfully masked my real IP while connected.
- Browsing worked normally secure HTTPS sites loaded fine.
- Disconnecting VPN instantly restored my original IP.
- Slight slowdown in browsing observed when VPN was active.

### **Benefits of VPN**

- Encrypts internet traffic, protecting from ISPs and hackers.
- Masks IP, improving privacy.
- Useful on public WiFi for secure connections.
- Can bypass geo-blocks or censorship.

# **Limitations of VPN**

- Slightly slower speeds due to encryption and routing.
- Free VPNs may have limited server options.
- VPN does not guarantee complete anonymity.
- Dependence on trust in VPN provider.