**VPN Setup and Test**

1. **Choose a Free VPN Service**
   * **Service Chosen:** [Proton VPN](https://protonvpn.com)
   * Known for strong privacy policies and no-logs policy. Offers unlimited bandwidth on free plan with access to servers in 3 countries (Japan, Netherlands, US).
2. **Sign Up for an Account**
   * Go to Proton VPN’s website and create a free account with an email address.
3. **Download and Install the VPN Client**
   * Install the VPN app for your device (Windows, Mac, Android, iOS, or Linux).
4. **Connect to a VPN Server**
   * Launch the app and connect to the **nearest free server** (e.g., United States).
5. **Verify IP Address Has Changed**
   * Visit <https://whatismyipaddress.com>
   * Your IP address should now reflect the VPN server location (e.g., US instead of your real location).
6. **Test Website Access & Speed**
   * Visit any website (e.g., <https://example.com>) to confirm it's loading.
   * Disconnect VPN and compare:
     + **Speed:** VPN may be slower depending on server load.
     + **IP:** Your original IP will now be restored.

**🔍 Step 7: Research VPN Encryption and Privacy Features**

**Proton VPN Free Plan Features:**

* **Encryption:** AES-256 bit, with secure protocols like OpenVPN and WireGuard.
* **Privacy:** No-logs policy, based in Switzerland (strong privacy laws).
* **DNS Leak Protection:** Built-in to prevent data leaks.
* **Kill Switch (on paid plans):** Prevents exposure if VPN disconnects unexpectedly.

**📝 Step 8: Summary of VPN Benefits and Limitations**

**Benefits of VPNs:**

* **Online Privacy:** VPNs hide your IP address and location, masking your identity from websites, ISPs, and trackers.
* **Encrypted Connection:** Prevents hackers and third parties from intercepting your data on public Wi-Fi or insecure networks.
* **Bypass Geo-Restrictions:** Access content blocked in certain countries (e.g., streaming services or news).
* **Avoid Censorship:** Useful in countries with heavy internet censorship.

**Limitations of VPNs:**

* **Speed Reduction:** VPNs can slow down your internet connection due to encryption overhead and server distance.
* **Free Plan Restrictions:** Fewer servers, limited speed, and no advanced features (e.g., streaming or P2P).
* **Not 100% Anonymous:** VPNs can be compelled by law to share logs if based in certain jurisdictions (though Proton VPN is based in privacy-friendly Switzerland).
* **Reliability:** Free servers may be overloaded or blocked by some services.