**Step 1: Choosing and Signing Up for a Free VPN**

I chose ProtonVPN, a reputable free VPN provider known for its strong privacy policies and no-logs approach. I signed up on the official ProtonVPN website by creating a free account.

**Step 2: Downloading and Installing the VPN Client**

The ProtonVPN client for Windows was downloaded and installed successfully. The installer was easily accessible from the ProtonVPN downloads page and followed standard installation procedures.

**Step 3: Connecting to a VPN Server**

After logging into the client, I connected to a free server located in Romania (RO-FREE#23), which was automatically suggested as one of the fastest free servers available.

**Step 4: Verifying IP Address Change**

Before the connection, my IP address was the one assigned by my ISP (223.237.172.12, located in India). After connecting to ProtonVPN, the IP changed to the VPN server’s IP (146.70.246.109, located in Australia for this connection), confirming that my real IP is hidden.

**Step 5: Browsing and Confirming Encryption**

Browsing websites through ProtonVPN was smooth, with data encrypted and tunneled securely via the Wire Guard (UDP) protocol. The app showed active features like Kill Switch and Net Shield for enhanced privacy and malware protection.

**Step 6: Disconnecting VPN and Comparing Speeds and IP**

I disconnected from the VPN and refreshed the IP address lookup site, which reverted to my original ISP-assigned IP. While connected, browsing speed was slightly slower due to encryption overhead, which returned to normal upon disconnection.

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

ProtonVPN uses modern encryption protocols like Wire Guard and OpenVPN, providing secure connections. Their privacy policies include no user activity logs, a kill switch to block internet if the VPN drops and features to prevent DNS leaks and malware.

**Overall Summary: VPN Benefits and Limitations**

* **Benefits:** VPN usage masks my real IP, securing my online presence and protecting my sensitive data on public Wi-Fi. It allows geo-unblocking and provides browsing anonymity.
* **Limitations:** Free VPN servers have limited speed and server choices. Encryption slightly reduces internet speed. Full privacy depends on the VPN provider’s policies and trustworthiness.

This ProtonVPN client usage demonstrates a straightforward setup process and confirms an effective VPN connection with private IP masking and encrypted browsing.