Report: Working with VPNs

VPN Setup Steps

- Choosing VPN Service: Selected ProtonVPN Free version as a reputable and secure VPN provider.
- Download and Installation: Downloaded and installed the ProtonVPN client on the system.
- Account Setup: Created a free ProtonVPN account and logged in to the client.
- Connection to VPN Server: Connected to a free VPN server provided by ProtonVPN. Server location was selected based on availability and speed.
- Verification of IP Change: Used whatismyipaddress.com to confirm that the public IP address had changed after connecting to the VPN.
- Browsing Test: Opened websites to ensure that browsing worked properly and traffic was being routed securely through the VPN.
- Disconnection Test: Disconnected from the VPN and compared IP and browsing speed with normal connection.

VPN Features (ProtonVPN)

- Encryption: ProtonVPN uses AES-256 encryption, ensuring secure communication.
- Protocols: Supports OpenVPN and IKEv2/IPSec protocols.
- No-logs policy: ProtonVPN does not track user activity, maintaining privacy.
- Kill Switch: Prevents data leaks if VPN disconnects unexpectedly (available in free plan as well).

Benefits of Using a VPN

- Protects privacy by hiding IP address and masking identity.
- Encrypts internet traffic, preventing ISP or third-party snooping.
- Helps bypass geo-restrictions on some websites.
- Useful in securing data over public Wi-Fi.

Limitations of VPNs

- Free versions may have limited server locations and speed restrictions.
- VPN cannot guarantee 100% anonymity (e.g., websites can still use cookies or fingerprinting).
- May slightly reduce browsing speed due to encryption and tunneling.
- Some services block VPN traffic.

Outcome

Successfully installed ProtonVPN, connected to a server, verified secure browsing with changed IP, and tested disconnection. Learned about VPN features, benefits, and limitations.