CS381 Exercise 15

Name: Zhang Yupeng

Student ID: 5130309468

1. Draw the figures of IP-frame in transport mode:

a) first ESP then AH

Origin IP hdr	AH hdr	ESP hdr	TCP	Data	ESP Trailer	ESP Auth

b) first AH then ESP

Origin IP hdr	ESP hdr	AH hdr	TCP	Data	ESP Trailer	ESP Auth

2. Describe the different VPNs and their usage

Solution:

1. Gateway-to-gateway: protects communications between two specific networks.
2. Host-to-gateway:protects communications between a host and a specific network, typically used to allow hosts on unsecured networks, such as traveling user, to gain access to internal organizational services.
3. Host-to-host: protects communication between two specific computers, often used when a user need to use or administer a remote system.
4. SSL VPN: It can be used with a standard Web browser. It's used to give remote users with access to Web applications, client/ server applications and internal network connections.