Network services revision

**Describe the differences between classful and classless addressing schemes.**

Classful divides ips into 5 categories

Classless replaces classful and intends to reduce ip depletion

1. **List the four main reasons for subnetting an IP network address.**

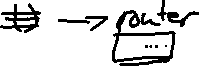
* Improve network performance and speed
* Boost network security.
* Control network growth.
* Ease administration.

1. **What is the function of a subnet mask?**

A subnet mask is used to divide an IP address into two parts. One part is host, the other is network

**how switches can be used to reduce traffic loads on a network**

switch breaks one network into many small networks, so the distance and repeater limitations are restarted. Second, this same segmentation isolates traffic and reduces collisions relieving network congestion



**The DHCP operations for lease origination and lease renewal. Include all the steps required.**

The process by which the DHCP client renews or updates its IP address configuration data with the DHCP server.

Step 1: ip address allocation

Step 2: ip address renewal

Step 3: ip address release

**Compare and contrast distance vector and link state routing protocols**

Distance vector protocols send their entire routing table to directly connect neighbours. Link state protocols send information about directly connected links to all the routers in the network.

**Write the commands to activate RIP for networks**

**En**

**Conf t**

**Router rip**

**Network (ip)**

**Network (ip)**