**Setting up IP Addresses:**

R1# **configure terminal**  
R1(config)# **interface fastEthernet 0/0**  
R1(config-if)# **ip address 192.168.85.17 255.255.255.240**  
R1(config-if)# **no shutdown**

R1(config)# **interface fastEthernet 0/1**  
R1(config-if)# **ip address 192.168.85.65 255.255.255.240**  
R1(config-if)# **no shutdown**

R1(config)# **interface fastEthernet 1/0**  
R1(config-if)# **ip address 192.168.85.1 255.255.255.240**  
R1(config-if)# **no shutdown**

R1(config)# **interface Loopback 0**  
R1(config-if)# **ip address 10.0.0.1 255.255.255.0**  
R1(config-if)# **exit**

R1# **configure terminal**

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#**hostname Router1**

Router1(config)#**ip domain-name arctiqlab.com**

Router1(config)**crypto key generate rsa**

Router1(config)#**line vty 0 4**

Router1(config-line)#**login local**

Router1(config-line)#**username user privilege 15 secret user**

Router1(config-line)#**ip access-list standard arctiq**

Router1(config-line)#**permit 192.168.85.5**

Router1 (config-line)# **access-class arctiq in**

Router1 (config-line)#**transport input ssh**

Router1 (config-line)# **exec-timeout 5**

Router1 (config-line)#exit

Router1(config)#**ip ssh version 2**

Router1(config)#**end**

**OSPF Routing**

Router1**# configure terminal**

Enter configuration commands, one per line. End with CNTL/Z.

Router1(config)#**router ospf 1**

Router1(config)#**network 192.168.85.0 0.0.0.15 area 0**

Router1(config)#**network 192.168.85.16 0.0.0.15 area 0**

Router1(config)#**network 192.168.85.64 0.0.0.15 area 0**

**Area based OSPF MD5 authentication:**

Router1#**configure terminal**

Enter configuration commands, one per line. End with CNTL/Z.

Router1(config)#**interface fa0/0**

Router1(config-if)#**ip ospf message-digest-key 1 md5 P@ssw0rd**

Router1(config-if)#**exit**

Router1(config)#**router ospf 1**

Router1(config-router)#**area 0 authentication message-digest**

Run command **“show ip ospf int f0/0”**

**Enabling SNMP v2**

Router1#**configure terminal**

Router1(config)#**snmp-server community rostring RO**

Router1(config)#**snmp-server community rwstring RO**

**SNMP Query Command**: snmpwalk –mALL –v1 –crostring 192.168.85.1 system