**Network Topology:**

**A picture containing screenshot, computer, rectangle, design

Description automatically generated**

**Router 1 (R1):**

R1# configure terminal

R1(config)# no ip domain-lookup

R1(config)# hostname R1

R1(config)# banner motd #Welcome to my world or networking#

R1(config)# line console 0

R1(config-line)# password C@nsPassw!

R1(config-line)# login

R1(config-line)# exit

R1# configure terminal

R1(config)# interface GigabitEthernet0/0/0

R1(config-if)# description LAN 2

R1(config-if)# ip address 192.168.10.129 255.255.255.192

R1(config-if)# no shutdown

R1(config-if)# exit

R1(config)# interface GigabitEthernet0/0/1

R1(config-if)# description LAN 1

R1(config-if)# ip address 192.168.10.1 255.255.255.128

R1(config-if)# no shutdown

R1(config-if)# exit

R1# configure terminal

R1(config)# enable secret ThisisaSecret

R1(config)# service password-encryption

R1(config)# security passwords min-length 10

R1(config)# ip domain-name netsec.com

R1(config)# username netadmin secret Ci$co12345

R1(config)# line vty 0 15

R1(config-line)# login local

R1(config-line)# transport input ssh

R1(config-line)# exit

R1(config)# crypto key generate rsa general-keys modulus 1024

**Switch 1 (S1):**

S1# configure terminal

S1(config)# no ip domain-lookup

S1(config)# hostname S1

S1(config)# banner motd #Enter Message Here#

S1(config)# line console 0

S1(config-line)# password C@nsPassw!

S1(config-line)# login

S1(config-line)# exit

S1# configure terminal

S1(config)# interface Vlan1

S1(config-if)# description LAN 1 SVI

S1(config-if)# ip address 192.168.10.2 255.255.255.128

S1(config-if)# no shutdown

S1(config-if)# exit

S1(config)# ip domain-name netsec.com

S1(config)# username netadmin secret Ci$co12345

S1(config)# line vty 0 15

S1(config-line)# login local

S1(config-line)# transport input ssh

S1(config-line)# exit

S1(config)# crypto key generate rsa general-keys modulus 1024

S1# configure terminal

S1(config)# interface range FastEthernet0/1-24

S1(config-if-range)# shutdown

S1(config-if-range)# description Unused Port - Shutdown

S1(config-if-range)# exit

**IPv4 Network: 192.168.10.0/24**

LAN 1:

Subnet: 192.168.10.0/25

First usable IP address: 192.168.10.1 (assigned to R1 G0/0/1)

Last usable IP address: 192.168.10.126 (assigned to PC1)

Subnet mask: 255.255.255.128

LAN 2:

Subnet: 192.168.10.128/26

First usable IP address: 192.168.10.129 (assigned to R1 G0/0/0)

Last usable IP address: 192.168.10.190 (assigned to PC2)

Subnet mask: 255.255.255.192

S1 SVI:

Subnet: 192.168.10.2/25 (second usable IP address of LAN 1)

Subnet mask: 255.255.255.128