

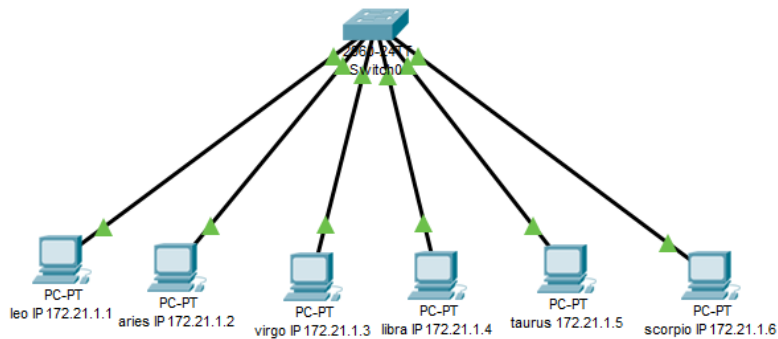
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NIM : L200170139

KELAS : C

MODUL: 4

Kegiatan 1



- Membuat 3 vlan dengan nama zodiak1, zodiak2, zodiak3

```
Switch0
Physical Config CLI Attributes
IOS Command Line Interface

Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

- Konfigurasi port pada vlan
- Zodiak1 : leo dan libra
 - Zodiak2 : aries dan Taurus
 - Zodiak3 : virgo dan scorpio

```
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
```

IUS Command Line Interface

```
Switch(config)#interface fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

- Menampilkan informasi vlan dengan 'show vlan brief' menampilkan semua informasi dan 'show vlan id ...' untuk menampilkan sesuai masing masing vlan.

```
%SYS-5-CONFIG_I: Configured from console by console

Switch#show vlan brief

VLAN Name                Status    Ports
-----
1    default                active    Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                           Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                           Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                           Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                           Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   zodiak1                active    Fa0/1, Fa0/4
20   zodiak2                active    Fa0/2, Fa0/5
30   zodiak3                active    Fa0/3, Fa0/6
1002 fddi-default          active
1003 token-ring-default    active
1004 fddinet-default        active
1005 trnet-default          active
Switch#show vlan id 10

VLAN Name                Status    Ports
-----
10   zodiak1                active    Fa0/1, Fa0/4

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp  BrdgMode Transl Trans2
-----
10   enet  100010   1500    -      -      -      -      -      0      0

Switch#show vlan id 20

VLAN Name                Status    Ports
-----
20   zodiak2                active    Fa0/2, Fa0/5
```

```
10 zodiak1 active Fa0/1, Fa0/4
20 zodiak2 active Fa0/2, Fa0/5
30 zodiak3 active Fa0/3, Fa0/6
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
Switch#show vlan id 10
```

VLAN Name	Status	Ports
10 zodiak1	active	Fa0/1, Fa0/4

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Transl	Trans2
10	enet	100010	1500	-	-	-	-	0	0

```
Switch#show vlan id 20
```

VLAN Name	Status	Ports
20 zodiak2	active	Fa0/2, Fa0/5

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Transl	Trans2
20	enet	100020	1500	-	-	-	-	0	0

```
Switch#show vlan id 30
```

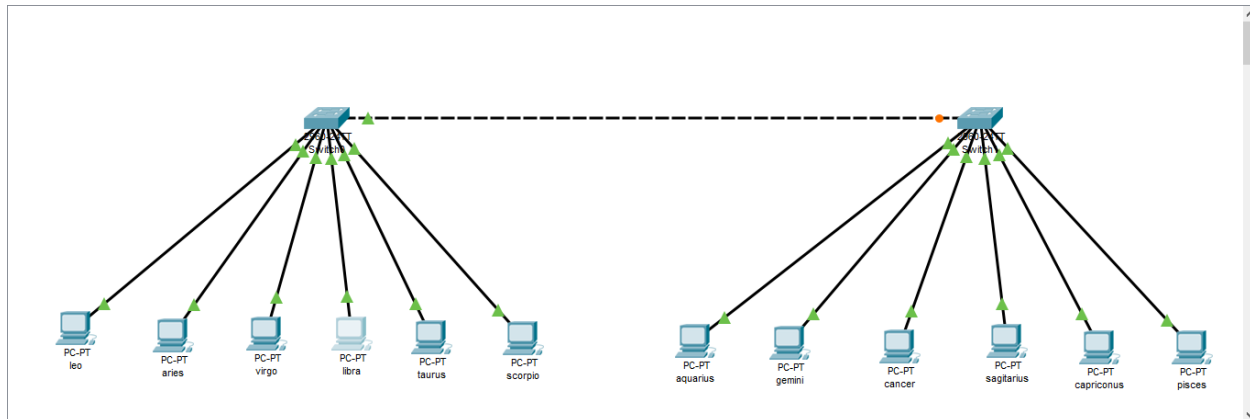
VLAN Name	Status	Ports
30 zodiak3	active	Fa0/3, Fa0/6

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Transl	Trans2
30	enet	100030	1500	-	-	-	-	0	0

```
Switch#
```

Ctrl+F6 to exit CLI focus

Kegiatan 2



Leo = 172.21.1.1

Aquarius = 172.21.1.3

Aries = 172.21.1.2

Gemini = 172.21.1.4

Virgo = 172.21.2.1

Cancer = 172.21.2.3

Libra = 172.21.2.2

Sagittarius = 172.21.2.4

Taurus = 172.21.3.1

Capricornus = 172.21.3.3

Scorpio = 172.21.3.2

Pisces = 172.21.3.4

Switch0

```
Physical Config CLI Attributes
IOS Command Line Interface

Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show vlan brief

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24
                                           Gig0/1, Gig0/2
10   zodiak1                 active
20   zodiak2                 active
30   zodiak3                 active
1002 fddi-default           active
1003 token-ring-default   active
1004 fddinet-default       active
1005 trnet-default         active
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/1
Switch(config-if)#switchport mode access

Ctrl+F6 to exit CLI focus
```

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

```
Switch(config)#interface fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#interface fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

Switch#show vlan brief

VLAN	Name	Status	Ports
1	default	active	Fa0/7, Fa0/8, Fa0/9, Fa0/10 Fa0/11, Fa0/12, Fa0/13, Fa0/14 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24, Gig0/1, Gig0/2
10	zodiak1	active	Fa0/1, Fa0/4
20	zodiak2	active	Fa0/2, Fa0/5
30	zodiak3	active	Fa0/3, Fa0/6
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

Switch#show vlan id 10

VLAN	Name	Status	Ports
10	zodiak1	active	Fa0/1, Fa0/4

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
10	enet	100010	1500	-	-	-	-	-	0	0

Switch#show vlan id 20

VLAN	Name	Status	Ports
20	zodiak2	active	Fa0/2, Fa0/5

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
20	enet	100020	1500	-	-	-	-	-	0	0

Switch#show vlan id 30

```
10 zodiak1 active Fa0/1, Fa0/4
20 zodiak2 active Fa0/2, Fa0/5
30 zodiak3 active Fa0/3, Fa0/6
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
Switch#show vlan id 10
```

VLAN	Name	Status	Ports
10	zodiak1	active	Fa0/1, Fa0/4

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
10	enet	100010	1500	-	-	-	-	-	0	0

```
Switch#show vlan id 20
```

VLAN	Name	Status	Ports
20	zodiak2	active	Fa0/2, Fa0/5

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
20	enet	100020	1500	-	-	-	-	-	0	0

```
Switch#show vlan id 30
```

VLAN	Name	Status	Ports
30	zodiak3	active	Fa0/3, Fa0/6

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
30	enet	100030	1500	-	-	-	-	-	0	0

Ctrl+F6 to exit CLI focus

Konfigurasi VLAN trunking pada switch 0

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/7
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up
changed state to up
^
% Invalid input detected at '^' marker.

Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show interface fa 0/7 switchport
Name: Fa0/7
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
```

Ctrl+F6 to exit CLI focus

```
Switch#show interface fa 0/7 switchport
Name: Fa0/7
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: All
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Unknown unicast blocked: disabled
```

```
Switch#show interface fa 0/7 trunk
      ^
% Invalid input detected at '^' marker.
```

```
Switch#show interface fa 0/7 trunk
      ^
% Invalid input detected at '^' marker.
```

```
Switch#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/8, Fa0/9, Fa0/10, Fa0/11 Fa0/12, Fa0/13, Fa0/14, Fa0/15

Ctrl+F6 to exit CLI focus


```
Switch#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/8, Fa0/9, Fa0/10, Fa0/11 Fa0/12, Fa0/13, Fa0/14, Fa0/15 Fa0/16, Fa0/17, Fa0/18, Fa0/19 Fa0/20, Fa0/21, Fa0/22, Fa0/23 Fa0/24, Gig0/1, Gig0/2
10 zodiak1	active	Fa0/1, Fa0/4
20 zodiak2	active	Fa0/2, Fa0/5
30 zodiak3	active	Fa0/3, Fa0/6
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
30	enet	100030	1500	-	-	-	-	-	0	0

--More--

Kemudian beralih ke switch 1, lakukan konfigurasi VLAN trunking dan selanjutnya lihat konfigurasi VLAN pada switch 1

Switch1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/7
Switch(config-if)#switchport mode trunk
^
% Invalid input detected at '^' marker.

Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
show interface fa 0/7 switchport
Name: Fa0/7
Switchport: Enabled
Administrative Mode: dynamic auto
Operational Mode: static access
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: native
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: All
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Unknown unicast blocked: disabled
```

```

Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: All
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Unknown unicast blocked: disabled

Switch#show interface fa 0/7 trunk
      ^
% Invalid input detected at '^' marker.

Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24
                                           Gig0/1, Gig0/2
10   zodiak1                 active
20   zodiak2                 active
30   zodiak3                 active
1002 fddi-default            active
1003 token-ring-default      active
1004 fddinet-default         active
1005 trnet-default           active

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp    BrdgMode Transl Trans2
-----
1    enet    100001   1500    -      -      -      -      -      0      0
10   enet    100010   1500    -      -      -      -      -      0      0
--More--

```

Setelah itu konfigurasi port port switch ke dalam VLAN

```

Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#vlan 20
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG I: Configured from console by console

```

Switch1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/8
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/9
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa 0/10
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/11
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa 0/12
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#interface fa 0/13
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#exit
Switch#
```

Switch1

Physical Config CLI Attributes

IOS Command Line Interface

```
show vlan brief
```

VLAN Name	Status	Ports
1 default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/14 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24, Gig0/1, Gig0/2
10 zodiak1	active	Fa0/8, Fa0/9
20 zodiak2	active	Fa0/10, Fa0/11
30 zodiak3	active	Fa0/12, Fa0/13
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

Show vlan id 10,20,30

```
Switch#show vlan id 10

VLAN Name                Status    Ports
-----
10    zodiak1                 active    Fa0/8, Fa0/9

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
10    enet    100010   1500  -     -     -     -     -         0      0

Switch#show vlan id 20

VLAN Name                Status    Ports
-----
20    zodiak2                 active    Fa0/10, Fa0/11

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
20    enet    100020   1500  -     -     -     -     -         0      0

Switch#show vlan id 30

VLAN Name                Status    Ports
-----
30    zodiak3                 active    Fa0/12, Fa0/13

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
30    enet    100030   1500  -     -     -     -     -         0      0

Switch#
```

Show vlan

```
Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/14
                                           Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                           Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                           Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   zodiak1                 active    Fa0/8, Fa0/9
20   zodiak2                 active    Fa0/10, Fa0/11
30   zodiak3                 active    Fa0/12, Fa0/13
1002 fddi-default           active
1003 token-ring-default     active
1004 fddinet-default         active
1005 trnet-default           active

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
1    enet    100001   1500  -     -     -     -     -         0      0
10   enet    100010   1500  -     -     -     -     -         0      0
20   enet    100020   1500  -     -     -     -     -         0      0
30   enet    100030   1500  -     -     -     -     -         0      0
--More--
```

Kemudian lakukan ping untuk mengetahui setiap PC apakah tersambung.

leo

Physical Config Desktop Programming Attributes

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.3.4

Pinging 172.21.3.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=1ms TTL=128
Reply from 172.21.1.1: bytes=32 time=3ms TTL=128
Reply from 172.21.1.1: bytes=32 time=1ms TTL=128
Reply from 172.21.1.1: bytes=32 time=1ms TTL=128

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 2ms

C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

libra

Physical Config Desktop Programming Attributes

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.2.3

Pinging 172.21.2.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.2.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

☐ Top