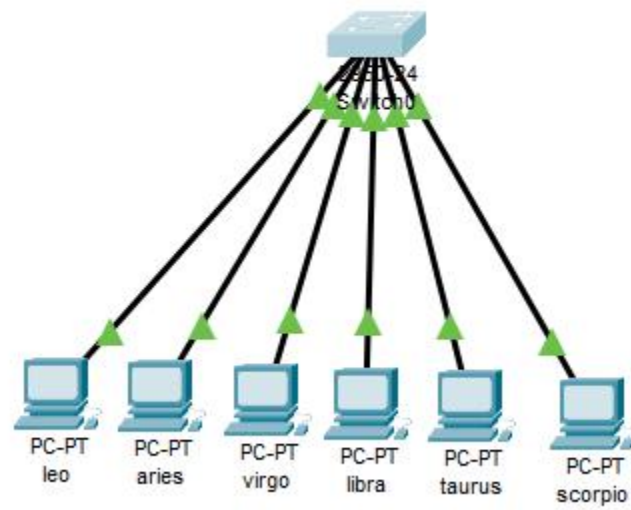


Nama : Sevtika Ichitia

NIM : L200180158

Modul 4

Kegiatan 1



Switch 0

```
Switch0
Physical Config CLI Attributes

Switch>enable
Switch#
Switch#vlan database
% Warning: It is recommended to configure VLAN from config mode,
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 10 name zodiak1
VLAN 10 modified:
    Name: zodiak1
Switch(vlan)#vlan 20 name zodiak2
VLAN 20 added:
    Name: zodiak2
Switch(vlan)#vlan 30 name zodiak3
VLAN 30 added:
    Name: zodiak3
Switch(vlan)#ex
APPLY completed.
Exiting....
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#end
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
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
------	------	--------	-------

```
Ctrl+F6 to exit CLI focus
```

Switch0

Physical Config **CLI** Attributes

```

Switch0#show vlan
VLAN Name                             Status    Ports
-----
10    zodiak1                             active    Fa0/15, Fa0/16, Fa0/17, Fa0/18
20    zodiak2                             active    Fa0/19, Fa0/20, Fa0/21, Fa0/22
30    zodiak3                             active    Fa0/23, Fa0/24
1002  fddi-default                         active
1003  token-ring-default                  active
1004  fddinet-default                    active
1005  trnet-default                      active
Switch0#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

Switch0#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

Switch0#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

Switch0#

```

DBDesigner4

Ctrl+F6 to exit CLI focus

Tugas 6A

No.	Variabel	Nilai
1	Nomor VLAN	VLAN 10
2	Nama VLAN	Zodiak1
3	Port	Fa0/1, Fa0/4
4	Status	active

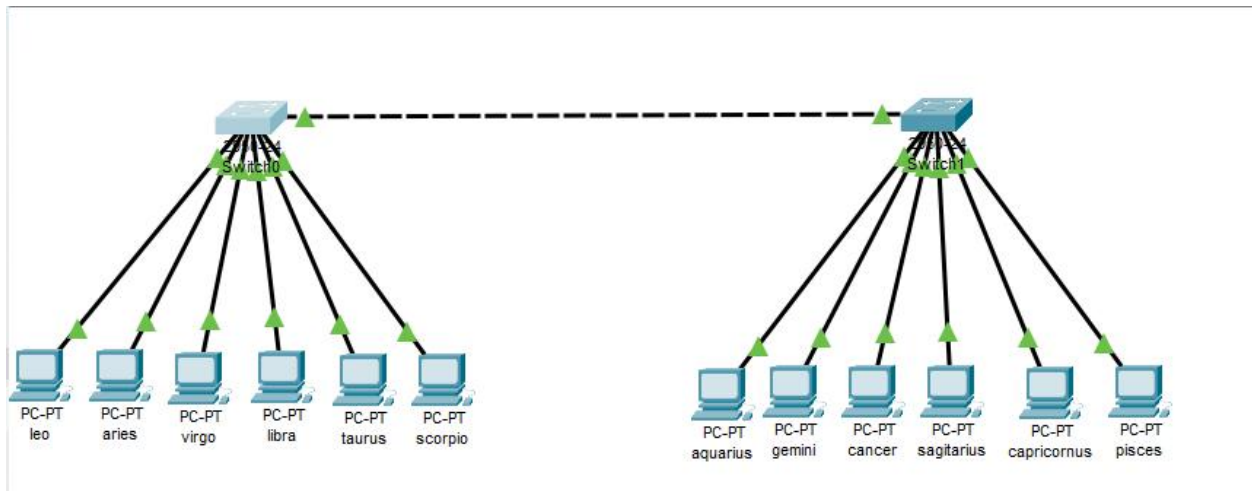
No.	Variabel	Nilai
1	Nomor VLAN	VLAN 20
2	Nama VLAN	Zodiak2
3	Port	Fa0/2, Fa0/5
4	Status	active

No.	Variabel	Nilai
1	Nomor VLAN	VLAN 30
2	Nama VLAN	Zodiak3
3	Port	Fa0/3, Fa0/6
4	Status	active

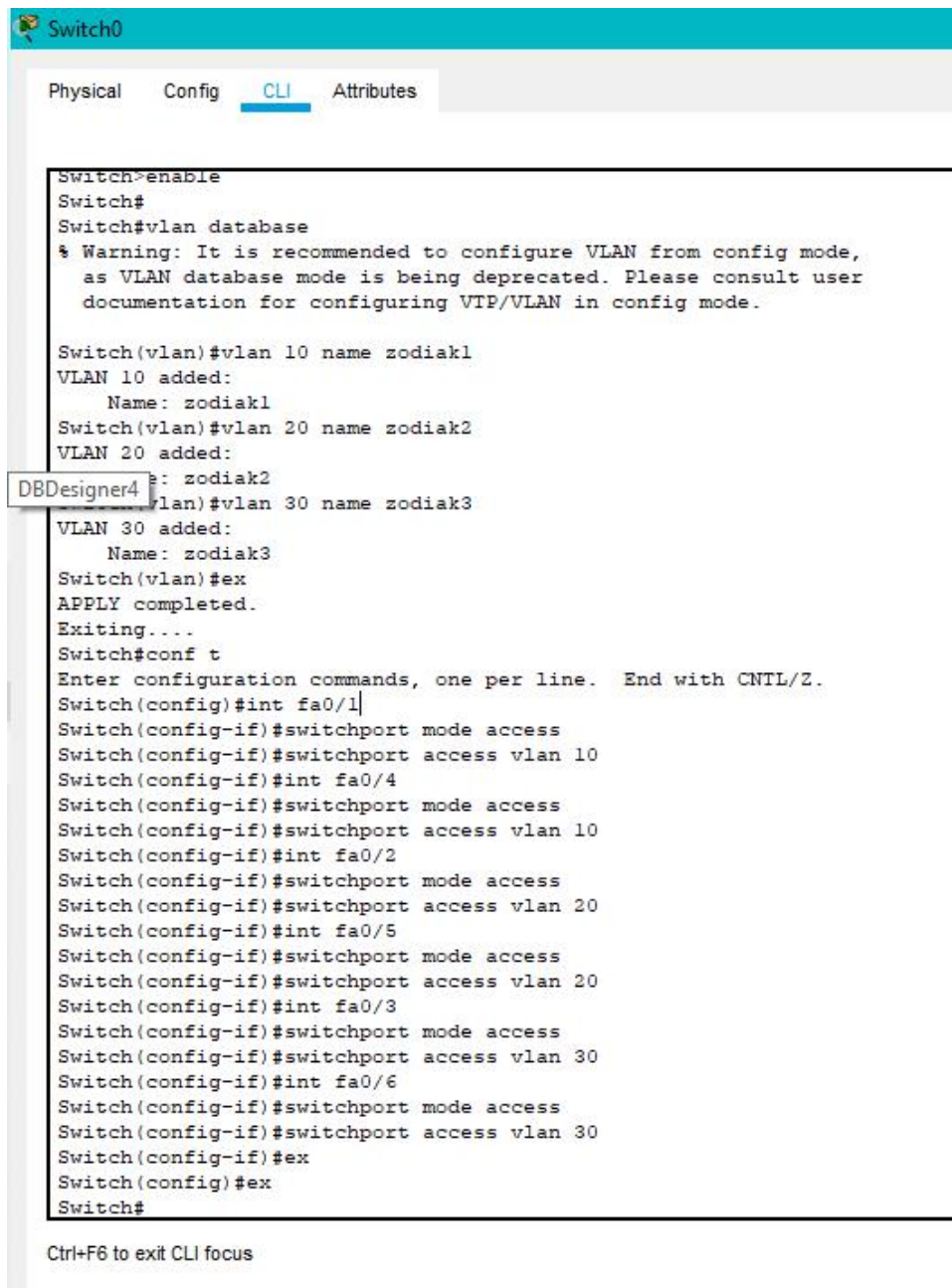
Tugas 6B

Hasil dari 6A yaitu configuration yang telah dilakukan menjadikan 3 id vlan yang terdiri dari zodiak1(vlan 10), zodiak2(vlan 20), zodiak3(vlan 30) dan masing-masing id vlan diisi dengan 2 port (PC/Client) dan semua vlan statusnya telah aktif.

Kegiatan 2



Switch 0



The screenshot shows a network switch interface with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying a series of commands and their outputs. A warning message is shown about VLAN database mode. The configuration includes creating three VLANs (10, 20, 30) with names zodiak1, zodiak2, and zodiak3. The configuration is then applied and the user exits. The interface configuration section shows setting access mode and VLAN membership for interfaces fa0/1 through fa0/6. A note at the bottom indicates that Ctrl+F6 can be used to exit CLI focus.

```
Switch0
Physical Config CLI Attributes

Switch>enable
Switch#
Switch#vlan database
% Warning: It is recommended to configure VLAN from config mode,
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 10 name zodiak1
VLAN 10 added:
    Name: zodiak1
Switch(vlan)#vlan 20 name zodiak2
VLAN 20 added:
    Name: zodiak2
Switch(vlan)#vlan 30 name zodiak3
VLAN 30 added:
    Name: zodiak3
Switch(vlan)#ex
APPLY completed.
Exiting...
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#ex
Switch(config)#ex
Switch#

Ctrl+F6 to exit CLI focus
```

```
Switch(config-if)#
Switch(config-if)#int fa0/1
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```



```
Switch>show int fa0/1 switchport
Name: Fa0/1
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
Appliance trust: none

Switch>show int trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/1     1-1005

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30
```

Ctrl+F6 to exit CLI focus

Physical
Config
CLI
Attributes

```

Switch>show int trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/1     1-1005

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30

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
10   zodiak1                active    Fa0/2, Fa0/5
20   zodiak2                active    Fa0/3, Fa0/6
30   zodiak3                active    Fa0/4, Fa0/7
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--

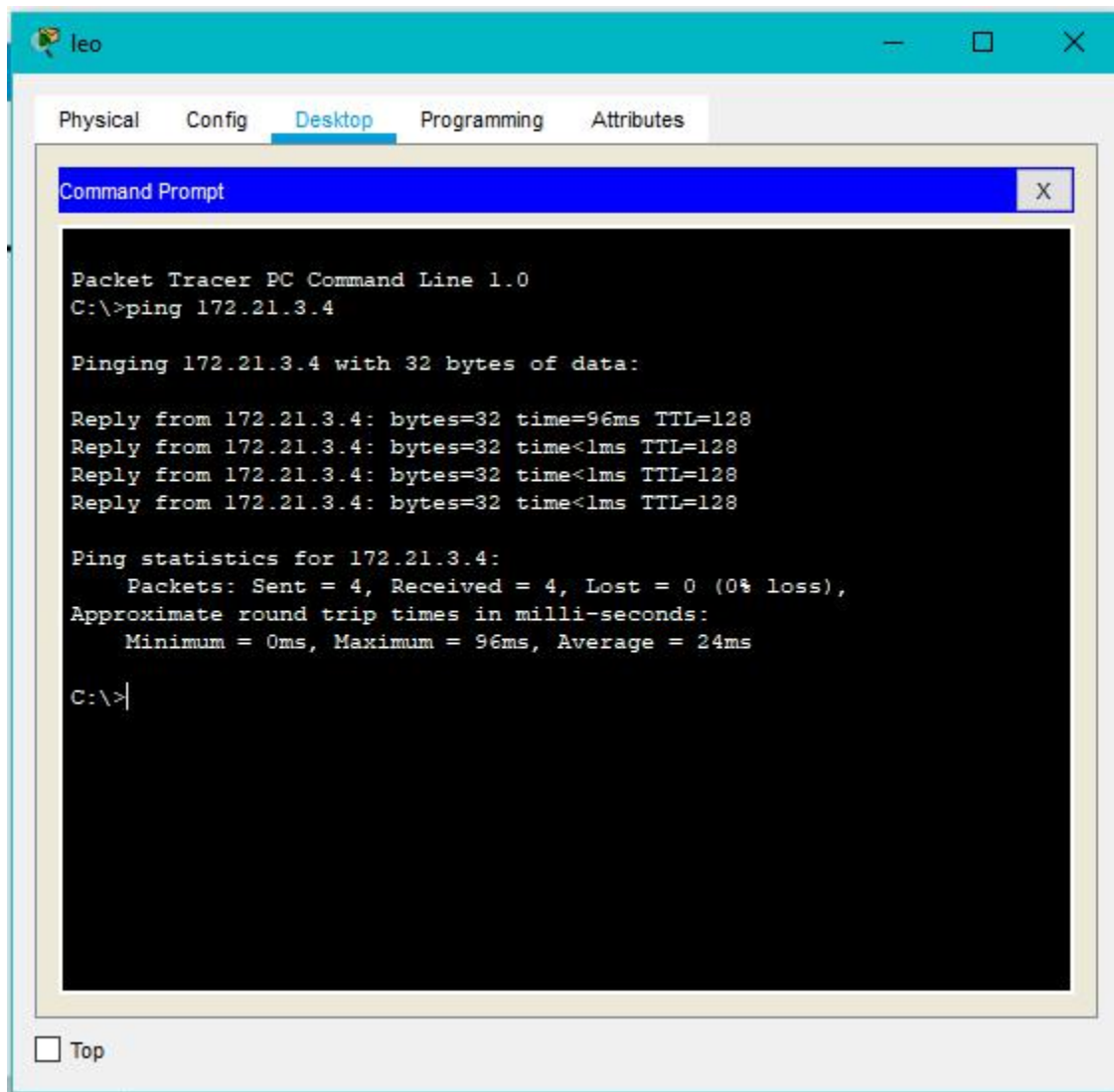
```

Ctrl+F6 to exit CLI focus

Tugas 7A

Hasil dari Trunking pada FastEthernet 0/1 adalah kita telah mengijinkan VLAN dari SW0 untuk memperluas VLANnya dengan jalur tunggal yaitu pada port 0/1 sebagai jalur utamanya atau bisa dibilang menghubungkan antar device dengan jalur dari port Trunk(Fa0/1).

Ping dari PC leo ke PC pisces



The screenshot shows a Packet Tracer PC Command Line window for PC 'leo'. The window has tabs for Physical, Config, Desktop, Programming, and Attributes, with 'Desktop' selected. Inside the Desktop tab is a 'Command Prompt' window. The command prompt shows the following output:

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

Pinging 172.21.3.4 with 32 bytes of data:

Reply from 172.21.3.4: bytes=32 time=96ms TTL=128
Reply from 172.21.3.4: bytes=32 time<1ms TTL=128
Reply from 172.21.3.4: bytes=32 time<1ms TTL=128
Reply from 172.21.3.4: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 96ms, Average = 24ms

C:\>|
```

At the bottom of the Command Prompt window, there is a checkbox labeled 'Top'.

Hasilnya RTO karena walaupun sudah di-Trunking kemudian menyampungkan sesama VLAN ID tapi kalau networknya berbeda tidak bisa terhubung.

Tugas 8A

Physical Config CLI Attributes

```
Switch>show int fa0/1 switchport
Name: Fa0/1
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

Switch>show int trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/1     1-1005

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30

Switch>show vlan
```

Ctrl+F6 to exit CLI focus

```

Switch>show int trunk

```

```

Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/1     1-1005

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30

```

```

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
10	zodiak1	active	Fa0/2, Fa0/5
20	zodiak2	active	Fa0/3, Fa0/6
30	zodiak3	active	Fa0/4, Fa0/7
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

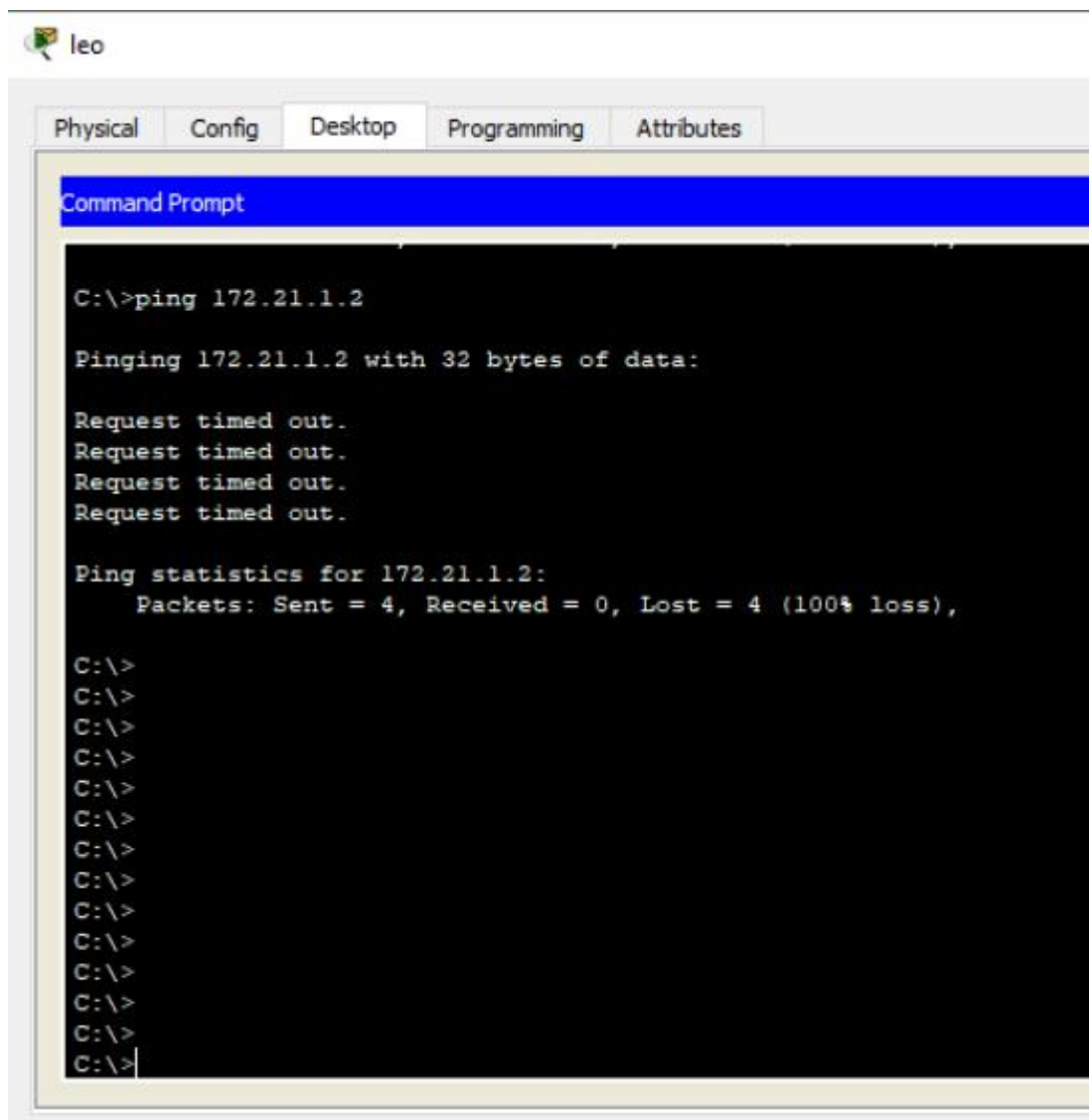
VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
30	enet	100030	1500	-	-	-	-	-	0	0

--More--

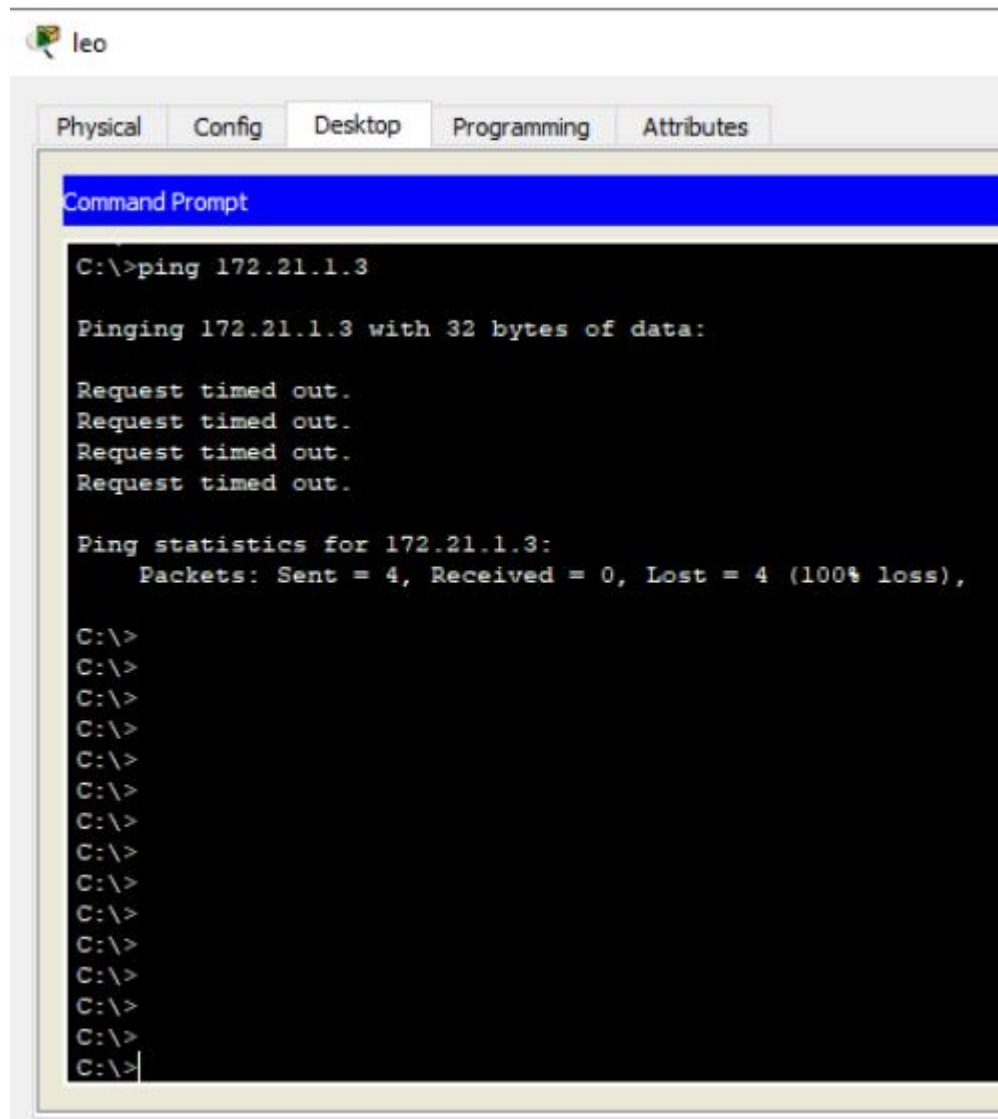
Ctrl+F6 to exit CLI focus

Ping dari PC leo ke PC aries

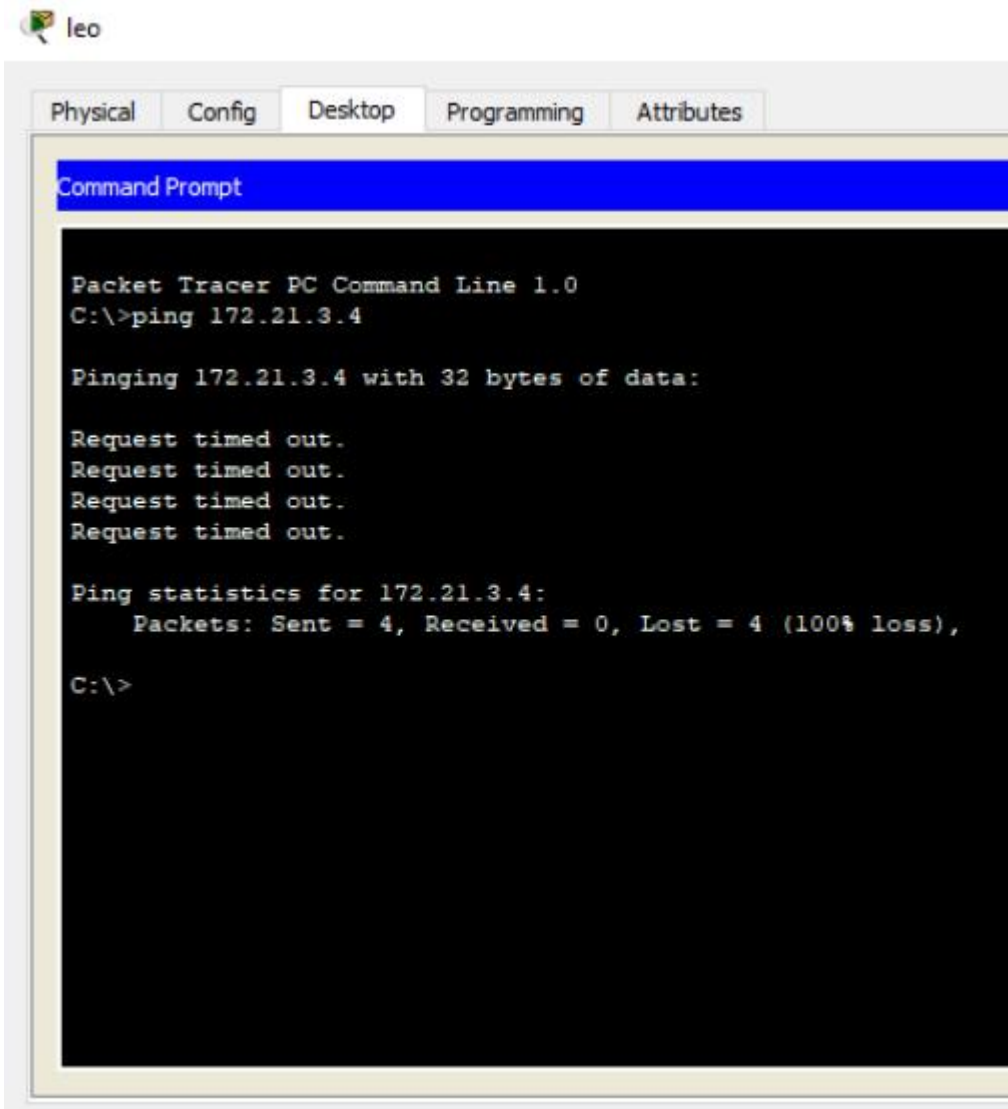
Ping dari PC leo ke PC aries



Ping dari PC leo ke PC aquarius



Ping dari PC leo ke PC pisces



The image shows a Packet Tracer PC Command Line window for a device named 'leo'. The window has tabs for Physical, Config, Desktop, Programming, and Attributes, with 'Desktop' currently selected. The command prompt shows the execution of a ping command to 172.21.3.4, which results in four 'Request timed out' messages and a 100% loss of packets.

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

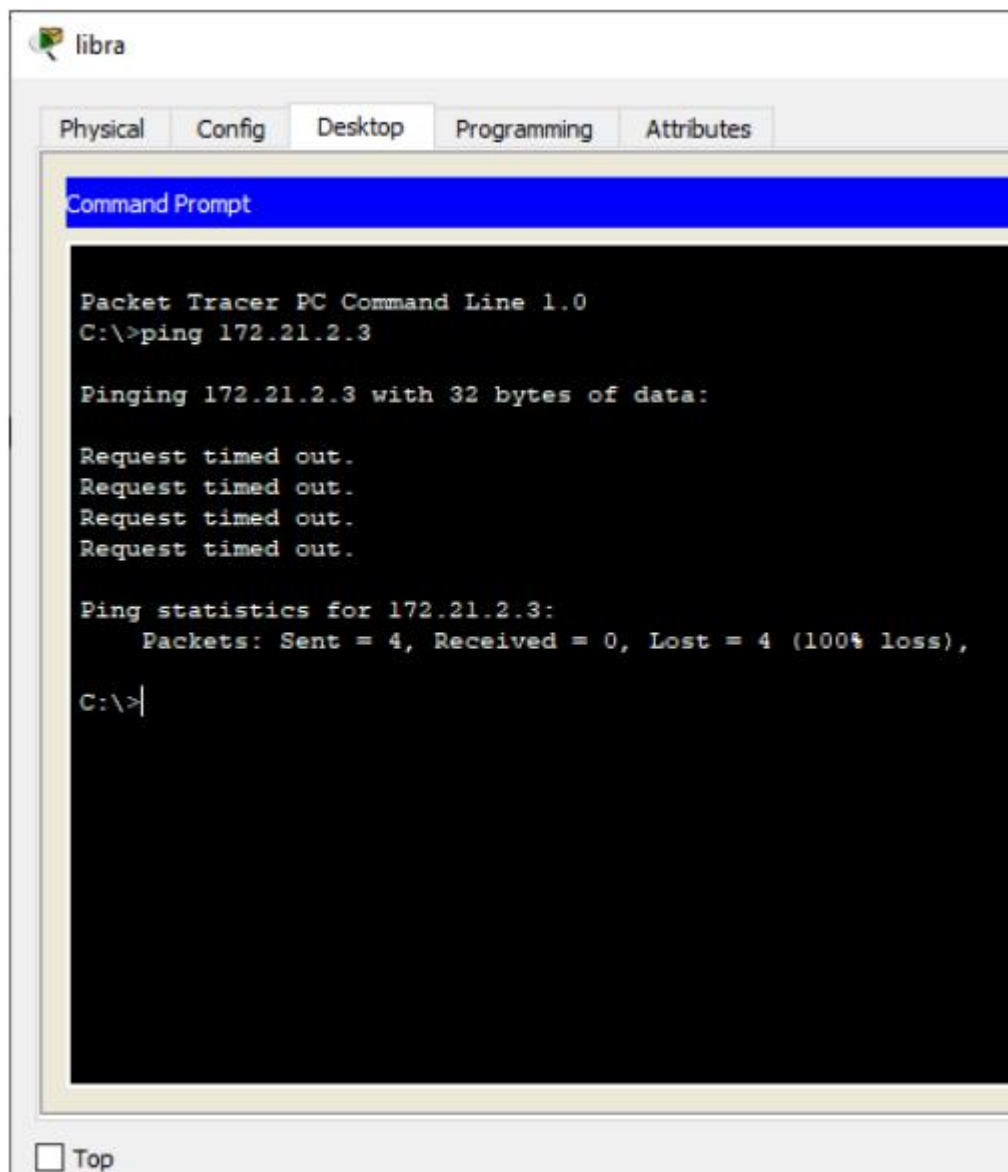
Pinging 172.21.3.4 with 32 bytes of data:

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 dari PC libra ke PC cancer



The image shows a Packet Tracer PC Command Line window for a device named 'libra'. The window has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes', with 'Desktop' currently selected. The command prompt shows the execution of a ping command to the IP address 172.21.2.3. The output indicates that all four requests timed out, resulting in a 100% loss of packets.

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

Pinging 172.21.2.3 with 32 bytes of data:

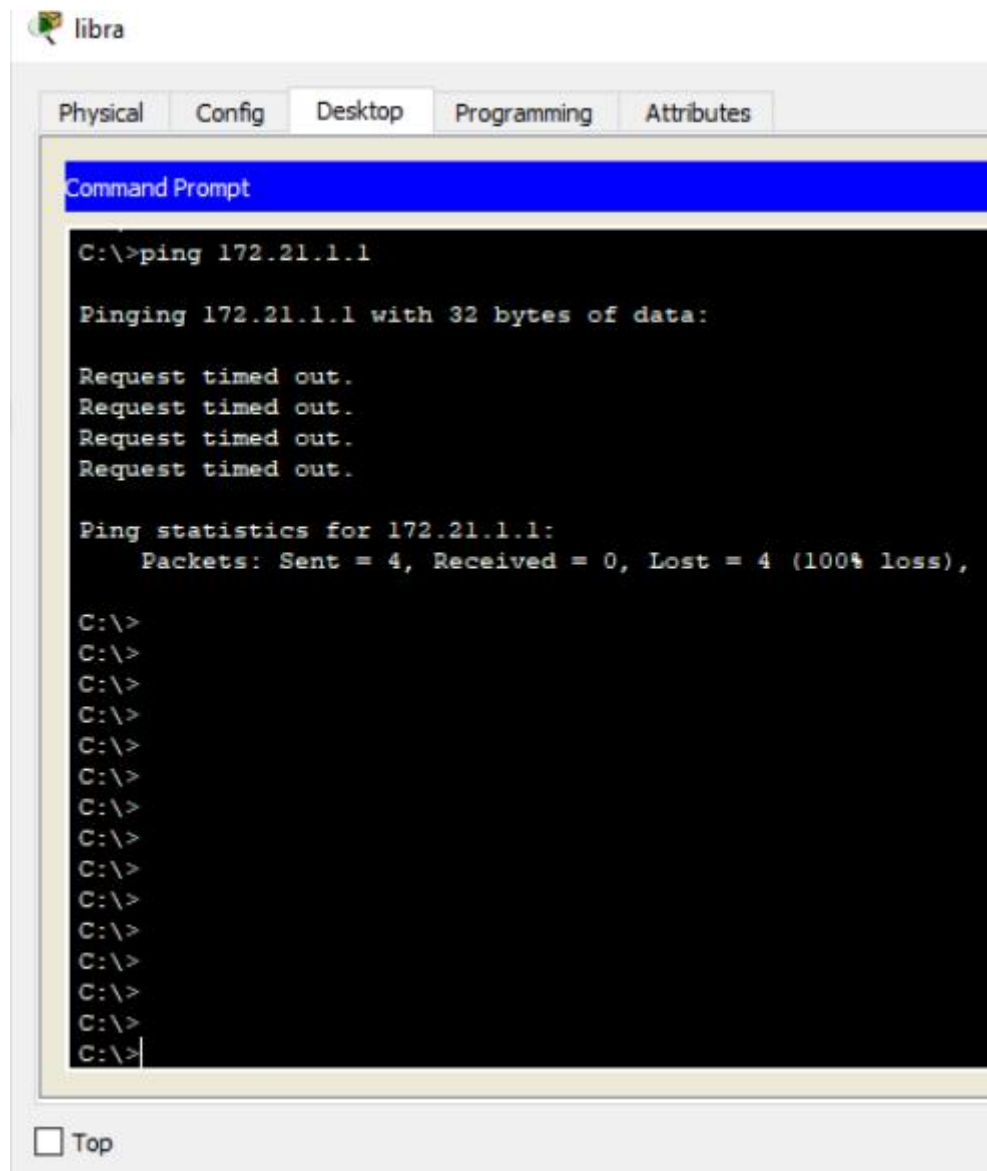
Request timed out.
Request timed out.
Request timed out.
Request timed out.

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

C:\>
```

☐ Top

Ping dari PC libra ke PC leo



```
libra

Physical Config Desktop Programming Attributes

Command Prompt

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:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>

☐ Top
```

Tugas 12A:

- Dari langkah 8 dapat disampaikan bahwa seluruh device yang sudah dikonfigurasi hasil dari pengujian koneksi (ping) menunjukkan bahwa device yang dalam jaringan yang sama namun memiliki perbedaan dalam VLAN menunjukkan hasil RTO, dalam network yang sama namun dalam VLAN yang berbeda juga menunjukkan hasil RTO.
- Untuk hasil pengujian koneksi (ping) yang reply hanyalah dalam device dengan spesifikasi jaringan yang sama dan dalam VLAN yang sama perlu adanya konfigurasi gateway dalam switch agar dalam setiap device dapat terkoneksi satu dengan yang lain.