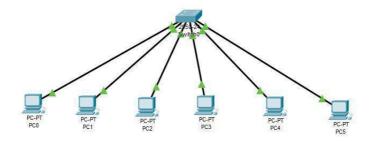
NAURA

L200180207

MODUL 4

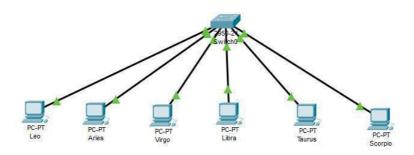
KEGIATAN 1.TOPOLOGI 1

A. Menggunakan packet tracker buat topologi berikut ini dengan menggunakan switch



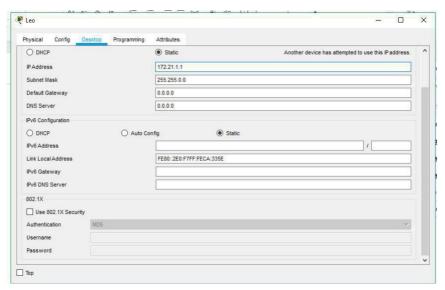
B. Beri nama masing-masing perangkat dengan SW1(switch), Leo(PC0), Aries(PC1),

Virgo(PC2), Pisces(PC3), Taurus(PC4), dan scorpio(PC5)



C. Konfigurasi masing-masing PC dengan nama dan alamat IP

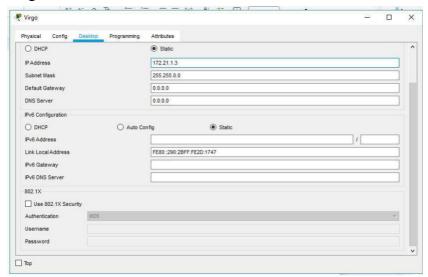
> Leo = 172.21.1.1/24



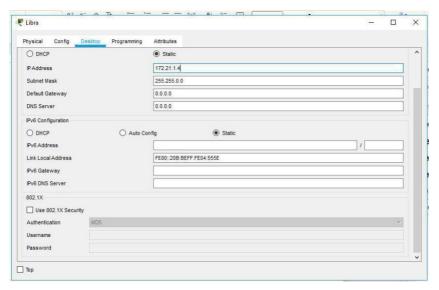
Aries = 172.21.1.2/24

| Aries | | | | | | | - | > |
|--|-------------|---------------|-----------------|---|--------|--|----|---|
| Physical Config | Desktop Pr | ogramming A | Attributes | | | | | |
| O DHCP | | (| Static | | | | | |
| IP Address | | [| 172.21.1.2 | | | | | |
| Subnet Mask | | | 255.255.þ.o | | | | | |
| Default Gateway | | | 0.0.0.0 | | | | | |
| DNS Server | | Ī | 0.0.0.0 | | | | | |
| IPv6 Configuration | | | | | | | | |
| | | _ | | 0 | 2200 | | | |
| O DHCP IPv6 Address | | O Auto Config | ı | • | Static | |], | |
| O DHCP | | | FE80::260:70FF: | | Static | | 1 | |
| O DHCP | | | | | Static | | | |
| O DHCP IPv6 Address Link Local Address | | | | | Static | | , | |
| O DHCP IPv6 Address Link Local Address IPv6 Gateway | | | | | Static | | , | |
| O DHCP IPv6 Address Link Local Address IPv6 Gateway IPv6 DNS Server | rity | | | | Static | | , | |
| O DHCP IPv6 Address Link Local Address IPv6 Gateway IPv6 DNS Server 802.1X | rity MD5 | | | | Static | | , | |
| DHCP IPv6 Address Link Local Address IPv6 Gateway IPv6 DNS Server 802.1X Use 802.1X Securi | | | | | Static | | 1 | |

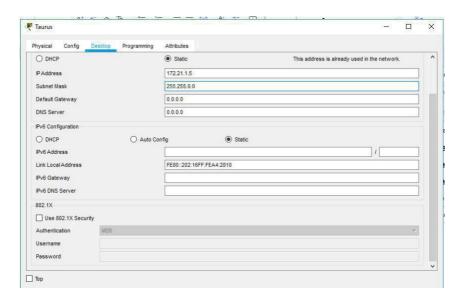
> Virgo = 172.21.1.3/24



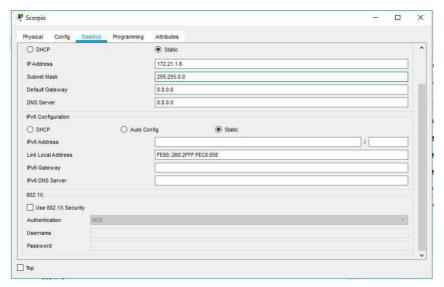
> Libra = 172.21.1.4/24



Taurus = 172.21.1.5/24

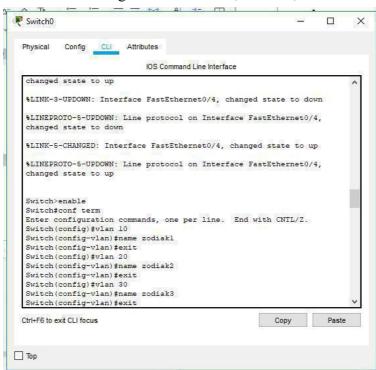


Scorpio = 172.21.1.6/24



D. Konfigurasi pada switch dengan mode user atau mode privileged,

buat 3 VLAN dengan nama zodiak1, zodiak2, dan zodiak3.

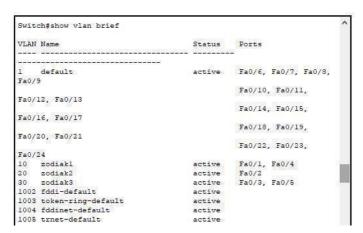


E. Pada mode configuration, konfigurasi port-port switch ke dalam VLAN zodiak1,

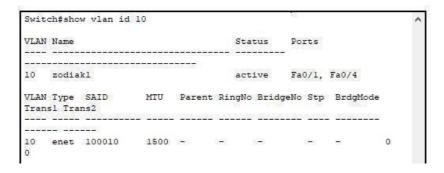


F. Pada mode user atau mode previleged, lihat konfigurasi VLAN yang telah dibuat.

Informasi VLAN keseluruhan



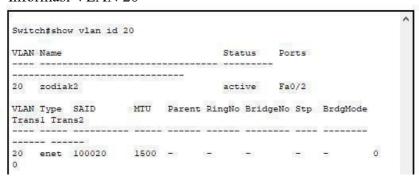
➤ Informasi VLAN 10



Tugas 6A

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

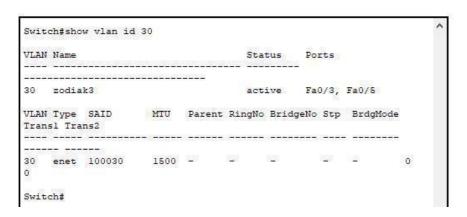
Informasi VLAN 20



Tugas 6A

| No | Variabel | Nilai |
|----|------------|---------|
| 1. | Nomor VLAN | 20 |
| 2. | Nama VLAN | Zodiak2 |
| 3. | Port | Fa0/2 |
| 4. | Status | Active |

Informasi VLAN 30



Tugas 6A

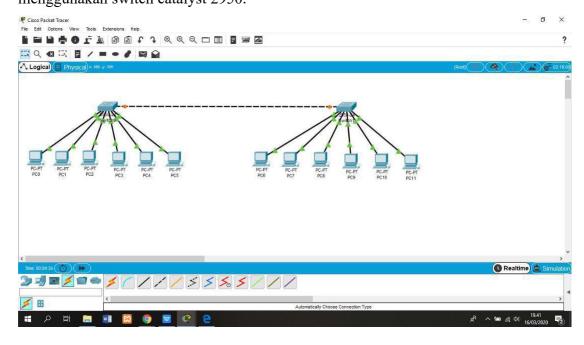
| No | Variabel | Nilai |
|----|------------|--------------|
| 1. | Nomor VLAN | 30 |
| 2. | Nama VLAN | Zodiak3 |
| 3. | Port | Fa0/3, Fa0/5 |
| 4. | Status | Active |

Tugas 6B: Jelaskan secara singkat hasil yang anda peroleh dari tugas 6A.

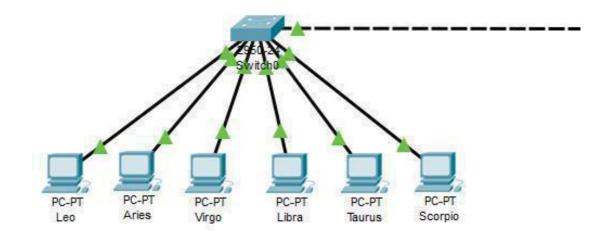
- Dalam VLAN ID, status VLAN menjadi active
- Identitas VLAN (1,2,3) sesuai dari pembuatan nama VLAN dengan nama zodiak1, zodiak2, dan zodiak3
- Port yang terdaftar dalam VLAN sesuai dengan konfigurasi yang telah dilakukan sebelumnya.

KEGIATAN 2. TOPOLOGI 2

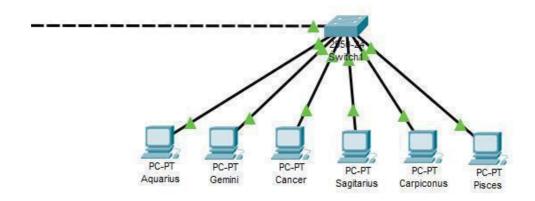
A. Menggunakan packet tracker buat topologi berikut ini dengan menggunakan switch catalyst 2950.



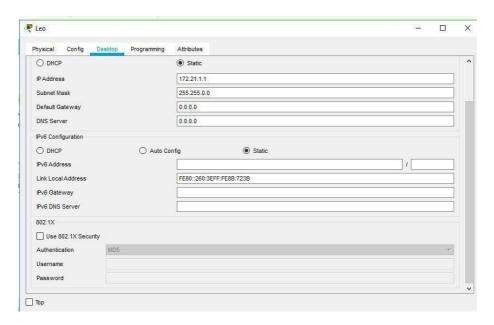
B. Beri nama masing-masing perangkat dengan SW1(switch 1), Leo(PC0), Aries(PC1), Virgo(PC2), Pisces(PC3), Taurus(PC4), dan scorpio(PC5) untuk segmen switch 1.



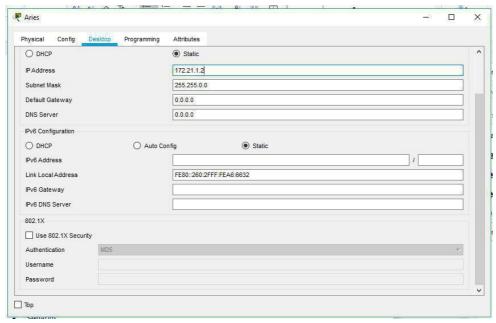
C. Beri nama masing-masing perangkat dengan SW2(switch 2), Aquarius(PC6), Gemini(PC7), Cancer(PC8), Sagitarius(PC9), Carpiconus(PC10), dan Pisces(PC11) untuk segmen switch 2.



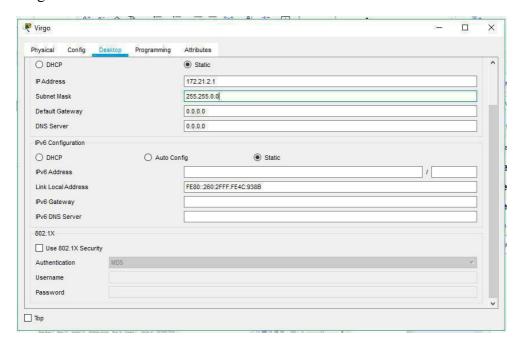
- D. Konfigurasi masing-masing PC dengan nama dan alamat IP
 - ightharpoonup Leo = 172.21.1.1/24



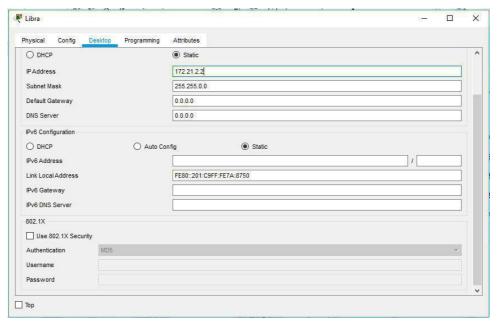
\rightarrow Aries = 172.21.1.2/24



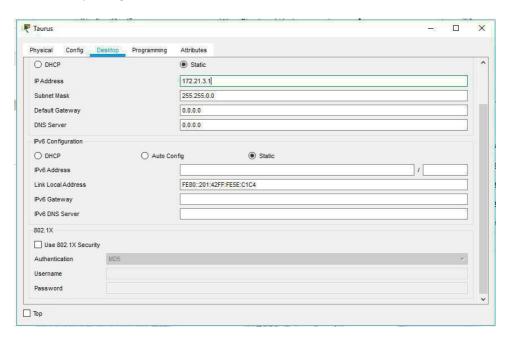
> Virgo = 172.21.2.1/24



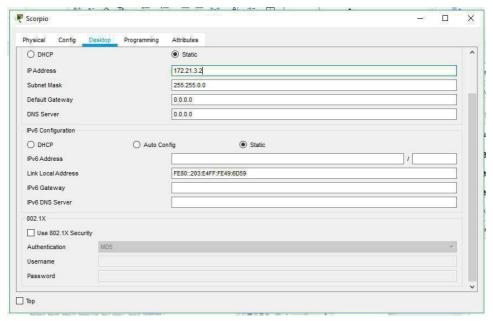
➤ Libra = 172.21.2.2/24



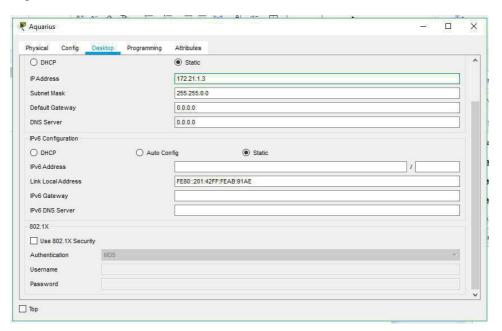
ightharpoonup Taurus = 172.21.3.1/24



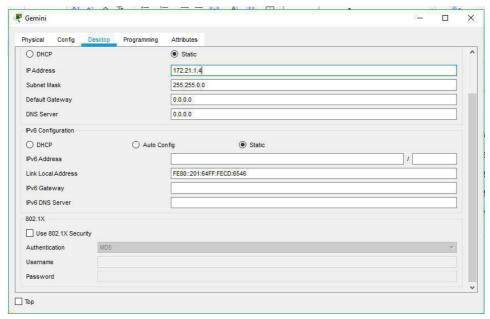
Scorpio = 172.21.3.2/24



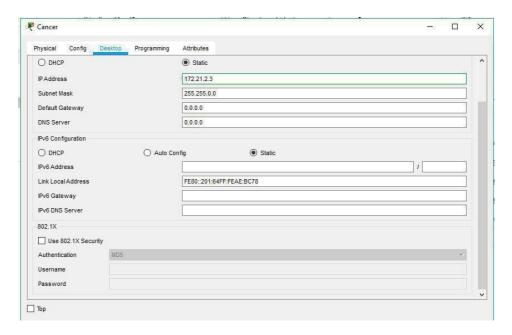
Aquarius = 172.21.1.3/24



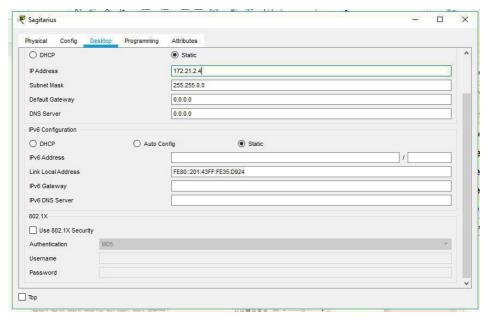
➤ Gemini = 172.21.1.4/24



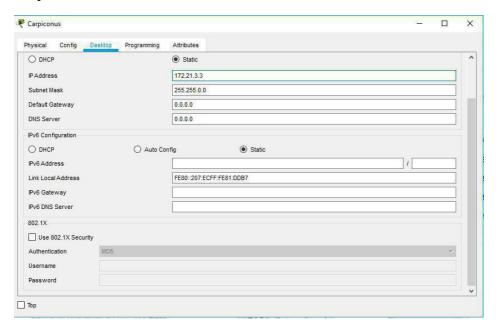
ightharpoonup Cancer = 172.21.2.3/24



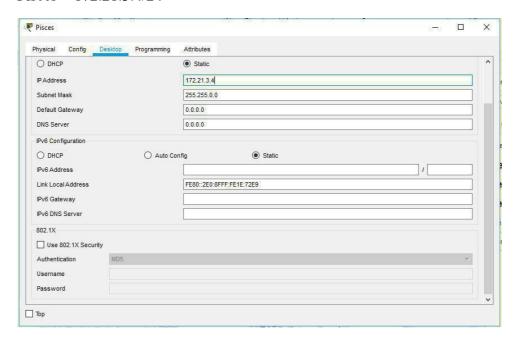
> Sagitarius = 172.21.2.4/24



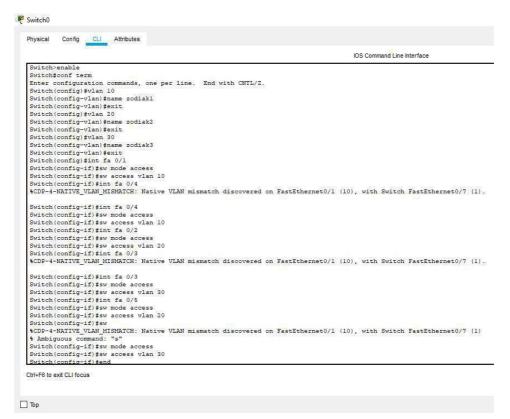
Carpiconus = 172.21.3.3/24



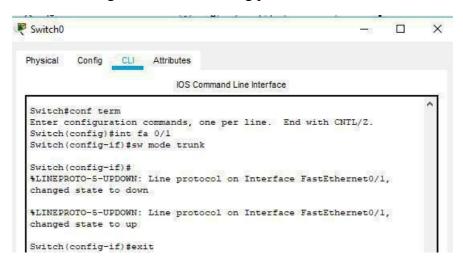
\triangleright Pisces = 172.21.3.4/24



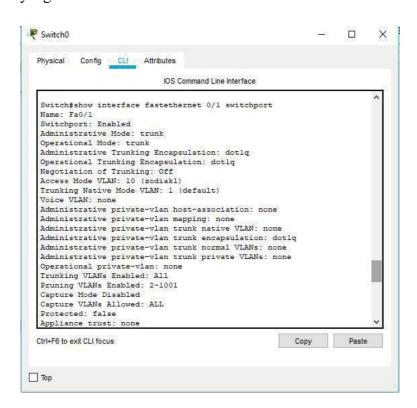
E. Lakukan langkah 4 dan 5 laboraturium 1 untuk switch 1



F. Lakukan konfigurasi VLAN trunking pada switch 1



G. Pada mode user atau mode previleged, lihat konfigurasi trunking yang telah dibuat

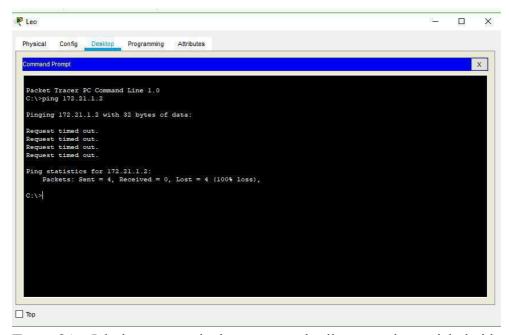


| VLAN | Name | | | | Sta | tus Po | rts | | | |
|------|---------|------------|------|--------|----------|----------|---------|---------------|---------|--------|
| 1 | default | | | | act | ive Fa | 0/8, Fa | Fa0/9 | | |
| | | | | | | Fa | 0/10, | Fa0/11, | Fa0/12, | Fa0/13 |
| | | | | | | Fa | 0/14, | Fa0/15, | Fa0/16, | Fa0/17 |
| | | | | | | Fa | 0/18, | Fa0/19, | Fa0/20, | Fa0/21 |
| | | | | | | Fa | 0/22, | Fa0/23, | Fa0/24 | |
| 10 | zodia | k1 | | | act. | ive Fa | 0/4 | | | |
| 20 | zodia | k2 | | | act. | ive Fa | 0/2 | | | |
| 30 | zodia | k3 | | | act: | ive Fa | 0/3, | Fa0/5 | | |
| 1002 | fddi- | default | | | act | ive | | | | |
| 1003 | token | -ring-defa | ault | | act. | ive | | | | |
| 1004 | fddin | et-default | 5 | | act | ive | | | | |
| 1005 | trnet | -default | | | act: | ive | | | | |
| VLAN | Type | SAID | MTU | Parent | RingNo | BridgeNo | Stp | BrdgMode | Transl | Trans2 |
| 1 | enet | 100001 | 1500 | - | - | - | - | - | 0 | 0 |
| 10 | enet | 100010 | 1500 | = | 75 | - | 75 | 1 | 0 | 0 |
| 20 | enet | 100020 | 1500 | | <u>-</u> | | 2 | - | 0 | 0 |
| 30 | enet | 100030 | 1500 | - | ÷ | - | + | | 0: | 0 |

Tugas 7A: Jelaskan secara singkat hasil yang anda peroleh dari langkah 7.

Mengaktifkan switch port Fa0/1(port yang digunakan untuk trunk),
 Administrative mode menjadi trunk dan juga Operational Mode trunk.

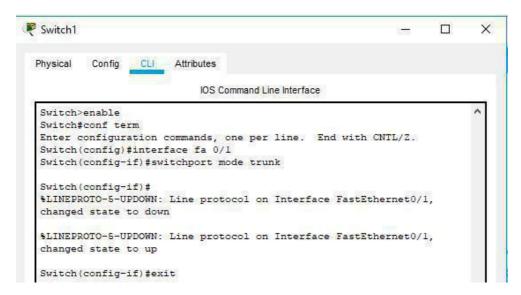
H. Lakukan ping dari PC leo ke PC Pisces



Tugas 8A : Jelaskan secara singkat mengapa hasil yang anda peroleh dari langkah 8 mendapatkan status "RTO"?

Ping dari PC leo ke PC Pisces mendapatkan status RTO atau Request
 Time Out karena keduanya berada pada jaringan yang berbeda dan dalam kondisi VLAN keduanya berada dalam VLAN yang berbeda(VLAN zodiak1 dan VLAN zodiak2)

I. Lakukan konfigurasi VLAN trunking pada switch 2 seperti langkah 6

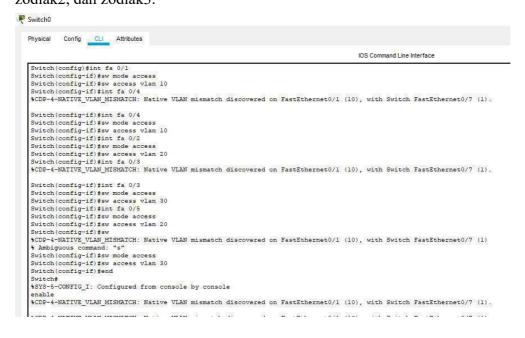


J. Pada mode user atau mode previleged, lihat konfigurasi VLAN pada switch 2

| VLAN | N Name | | | | | tus Po | Ports | | | | |
|------|---------|------------|------|--------|-----------|-----------------|----------------------------|---------------------|---------|--------|--|
| 1 | default | | | | | ive Fa | Fa0/2, Fa0/3, Fa0/4, Fa0/5 | | | | |
| | | | | | | Fa | 0/6, | Fa0/7, Fa | 0/8, Fa | 0/9 | |
| | | | | | | Fa | 0/10, | Fa0/11, | Fa0/12, | Fa0/13 | |
| | | | | | | Fa | 0/14, | Fa0/15, | Fa0/16, | Fa0/17 | |
| | | | | | | Fa | 0/18, | Fa0/19, | Fa0/20, | Fa0/21 | |
| | | | | | | Fa | 0/22, | Fa0/23, | Fa0/24 | | |
| 1002 | fddi- | default | | | act: | ive | | | | | |
| 1003 | token | -ring-defa | ault | | act: | ive | | | | | |
| 1004 | fddin | et-default | t | | act: | ive | | | | | |
| 1005 | trnet | -default | | | act | ive | | | | | |
| VLAN | Туре | SAID | MTU | Parent | RingNo | BridgeNo | Stp | BrdgMode | Transl | Trans2 | |
| 1 | enet | 100001 | 1500 | | | | 27.77.73 7 | Name (Section 1997) | 0 | 0 | |
| 1002 | fddi | 101002 | 1500 | 125 | | 18 | 25 | | 0 | 0 | |
| | | | 1500 | | 33 | - | H | - | 0 | 0 | |
| 1004 | fdnet | 101004 | 1500 | - | - | - | ieee | - | 0 | 0 | |
| 1005 | trnet | 101005 | 1500 | _ | 653 | 12 0 | ibm | N-201 | 0 | 0 | |

Tugas 10A: Jelaskan secara singkat hasil yang anda peroleh dari langkah 10.

 Dapat disimpulkan bahwa pada konfigurasi trunking sudah dilakukan dan dalam switch menunjukkan konfigurasi trunking sudah berjalan. Port yang telah didaftarkan dalam trunking memiliki kapasitas untuk memanaged beberapa hal yang berkaitan dengan domain(1, 10, 20, 30). K. Pada mode configuration, konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3.



L. Lakukan ping dari:

➤ Leo ke Aries

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.2

Pinging 172.21.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.21.1.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

> Leo ke Aquarius

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.2

Pinging 172.21.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.
Pequest timed out.
Ping statistics for 172.21.1.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Leo ke Pisces

```
Pinging 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),
```

➤ Libra ke Cancer

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

Libra ke Leo

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Request timed out.

Ping statistics for 172.21.1.1:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Tugas 12A: Jelaskan secara singkat hasil yang anda peroleh dari langkah 8.

- Dari langkah 8 dapat disimpulkan bahwa seluruh device yang sudah dikonfigurasi hasil dari pengujian koneksi(ping) menunjukkan bahwa device yang dalam jaringan yang sama namun memiliki perbedaan 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.