

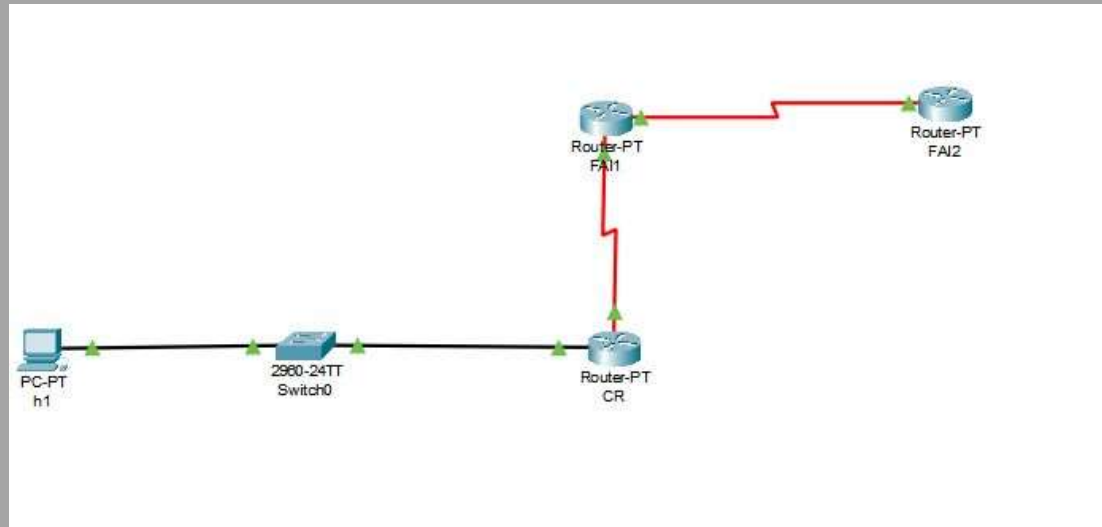
TP-Devoir-Routage Dynamique

:initiation à BGP

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Tâche 1 :

1-



h1

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::290:2BFF:FE07:BB95

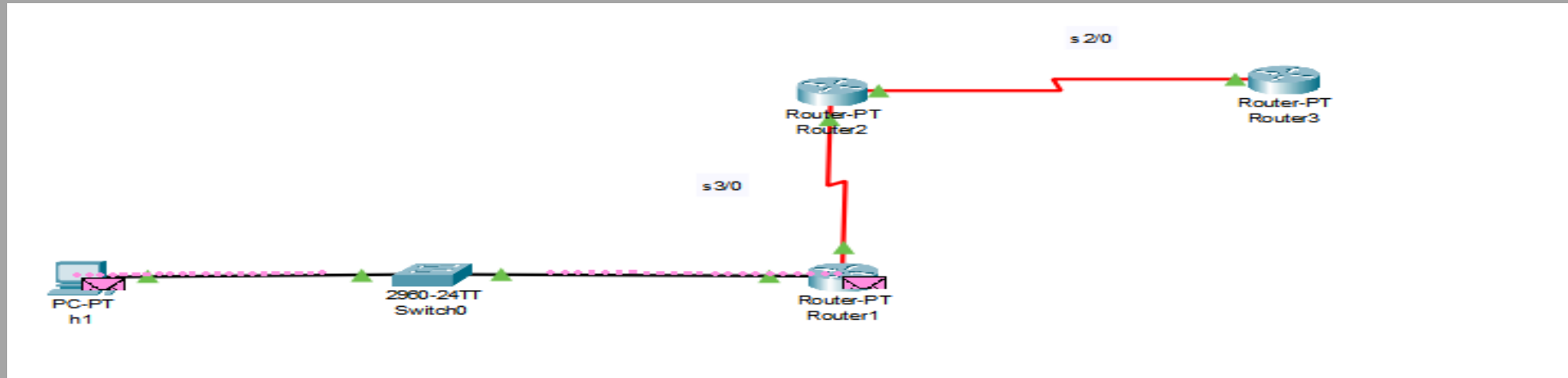
Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

3-



	Successful	Router1	Router2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	Router2	Router3	ICMP		2.001	N	1	(edit)	(delete)
	Failed	Router1	Router3	ICMP		4.000	N	2	(edit)	(delete)

Le routeur CR est-il en mesure d'atteindre le routeur
FAI2 ? L'hôte client est-il
en mesure d'atteindre FAI1 ?

non et non

FAI2

Physical Config CLI Attributes

IOS Command Line Interface

```
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#end
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
?Bad filename
%Error parsing filename (Bad file number)
Router#enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface loopback0

Router(config-if)#ip address 192.168.200.1 255.255.255.0
Router(config-if)#
```

Copy Paste

☐ Top

FAI1

Physical Config CLI Attributes

IOS Command Line Interface

```
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#end
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#hostname FAI1
^
% Invalid input detected at '^' marker.

Router#hostnameE FAI1
^
% Invalid input detected at '^' marker.

Router#hostname FAI1
^
% Invalid input detected at '^' marker.

Router#enable
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface loopback0

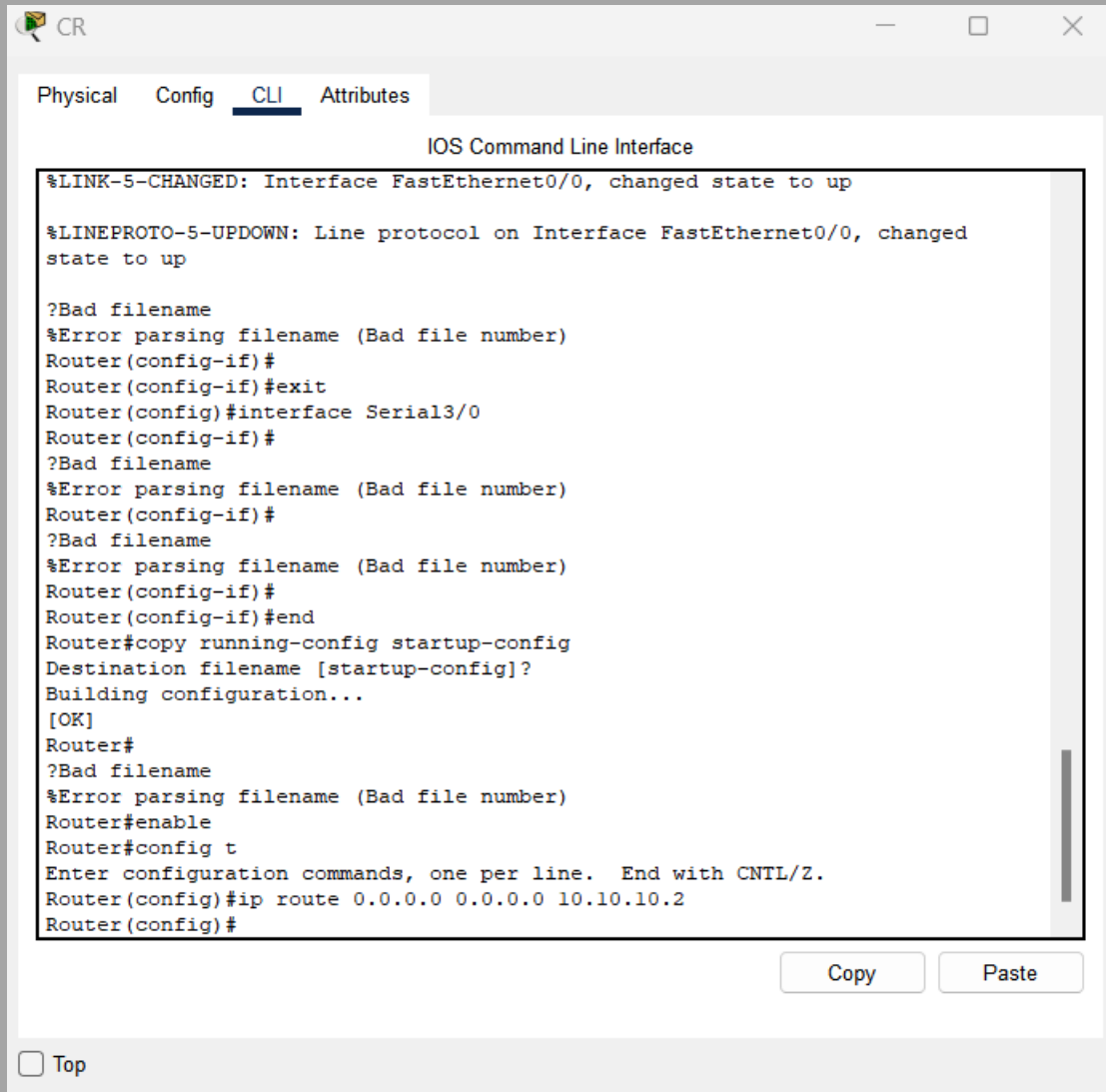
Router(config-if)#ip address 192.168.100.1 255.255.255.0
Router(config-if)#
```

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☐ Top

Tâche 2 :

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Physical Config CLI Attributes

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

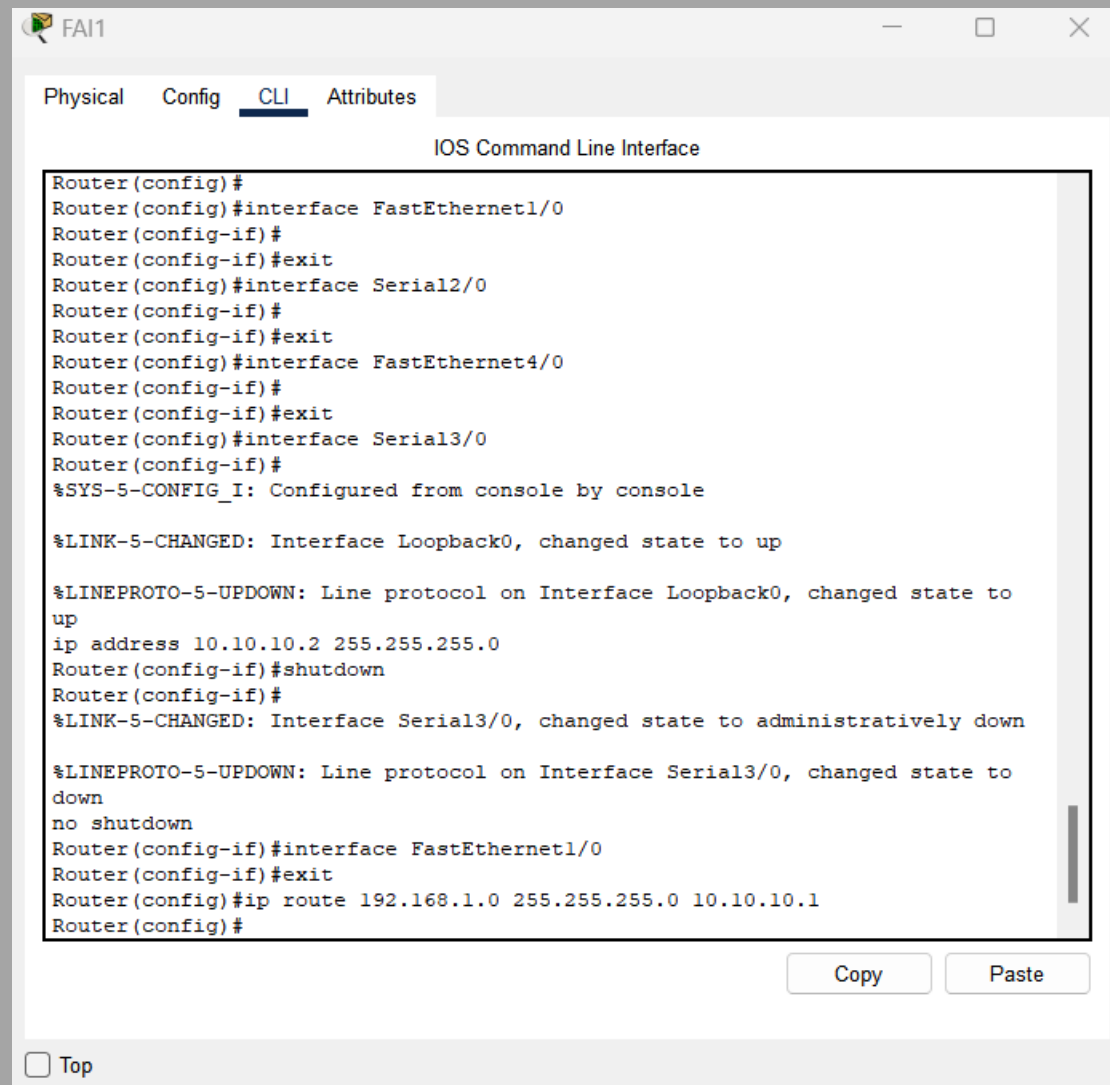
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up

?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#end
Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
?Bad filename
%Error parsing filename (Bad file number)
Router#enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.2
Router(config)#
```

Copy Paste

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6)



Physical Config CLI Attributes

IOS Command Line Interface

```
Router(config)#
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet4/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
%SYS-5-CONFIG_I: Configured from console by console

%LINK-5-CHANGED: Interface Loopback0, changed state to up



%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to
up
ip address 10.10.10.2 255.255.255.0
Router(config-if)#shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to administratively down

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to
down
no shutdown
Router(config-if)#interface FastEthernet1/0
Router(config-if)#exit
Router(config)#ip route 192.168.1.0 255.255.255.0 10.10.10.1
Router(config)#
```

Copy Paste

☐ Top

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Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	h1	FAI1	ICMP		0.000	N	0	(edit)	

Tâche 3 :

8-

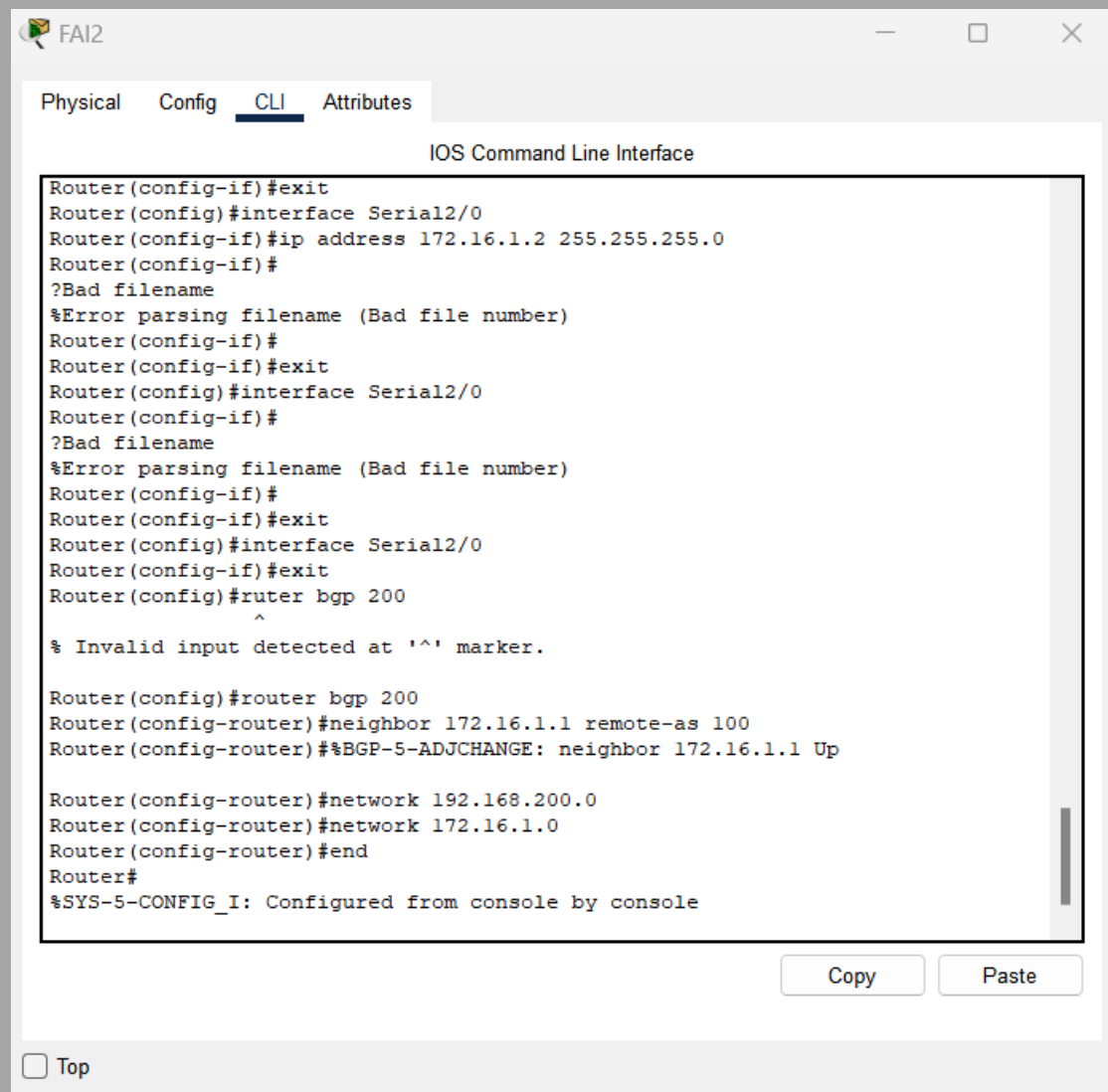
FAI1

Physical Config CLI Attributes

IOS Command Line Interface

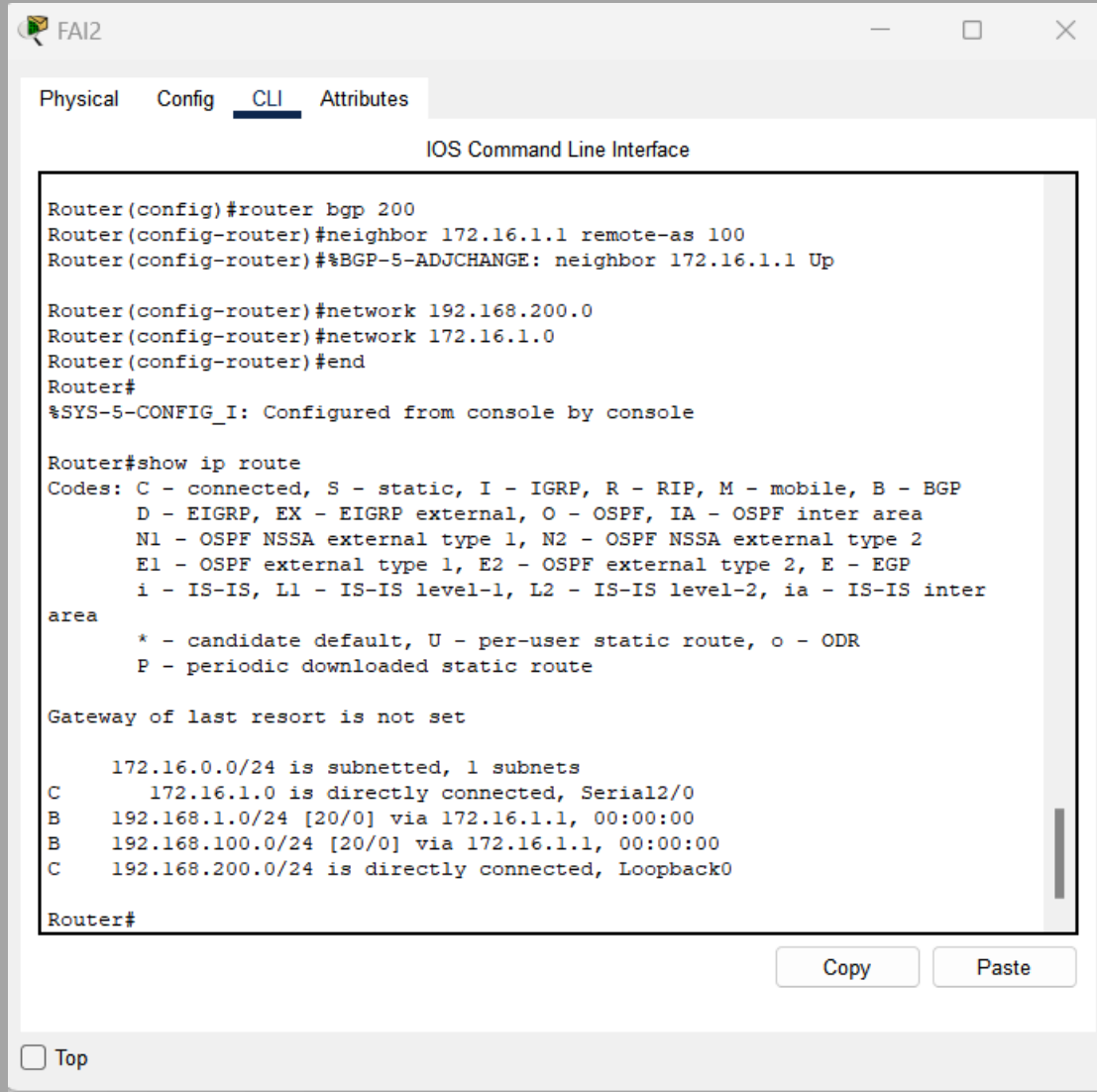
```
?Bad filename
%Error parsing filename (Bad file number)
Router(config)#
Router(config)#interface Serial3/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
?Bad filename
%Error parsing filename (Bad file number)
Router(config-if)#exit
Router(config)#router bgp 100
Router(config-router)#neighbor 172.16.1.2 remote-as 200
Router(config-router)#network 192.168.1.0
Router(config-router)#network 192.168.100.0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#
```



Tâche 4 :

10-



The screenshot shows a network simulator window titled "FAI2" with a tabbed interface. The "CLI" tab is active, displaying the "IOS Command Line Interface". The terminal shows the following commands and output:

```
Router(config)#router bgp 200
Router(config-router)#neighbor 172.16.1.1 remote-as 100
Router(config-router)%%BGP-5-ADJCHANGE: neighbor 172.16.1.1 Up

Router(config-router)#network 192.168.200.0
Router(config-router)#network 172.16.1.0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
       area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

      172.16.0.0/24 is subnetted, 1 subnets
C       172.16.1.0 is directly connected, Serial12/0
B       192.168.1.0/24 [20/0] via 172.16.1.1, 00:00:00
B       192.168.100.0/24 [20/0] via 172.16.1.1, 00:00:00
C       192.168.200.0/24 is directly connected, Loopback0

Router#
```

At the bottom of the window, there are "Copy" and "Paste" buttons, and a "Top" button with a checkbox.

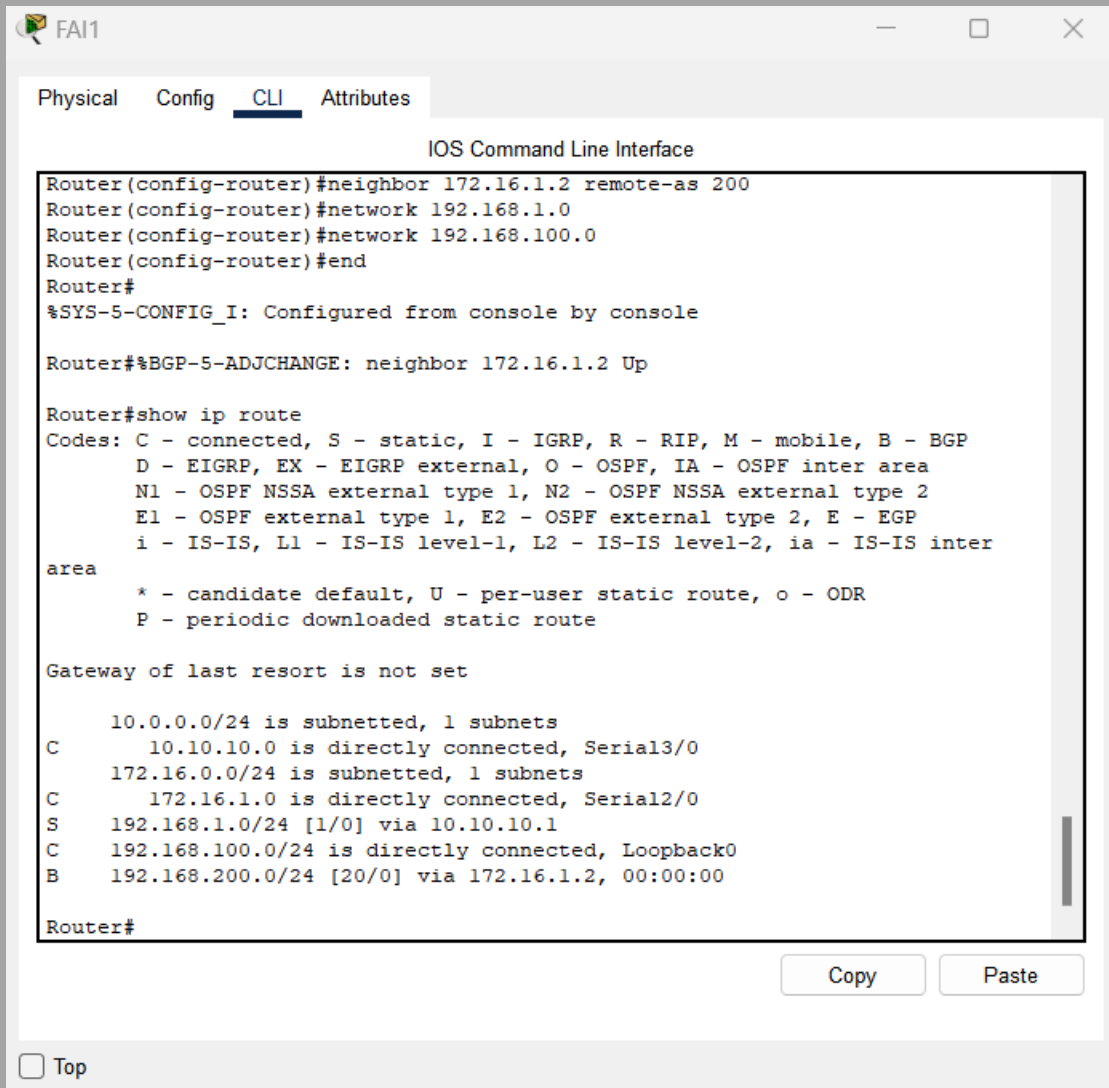
11-oui

12-B

14-oui

15-R2

b-



The screenshot shows a terminal window titled 'FA11' with tabs for 'Physical', 'Config', 'CLI', and 'Attributes'. The 'CLI' tab is active, displaying the 'IOS Command Line Interface'. The terminal shows the following commands and output:

```
Router(config-router)#neighbor 172.16.1.2 remote-as 200
Router(config-router)#network 192.168.1.0
Router(config-router)#network 192.168.100.0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#%BGP-5-ADJCHANGE: neighbor 172.16.1.2 Up

Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
       area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

    10.0.0.0/24 is subnetted, 1 subnets
C      10.10.10.0 is directly connected, Serial3/0
    172.16.0.0/24 is subnetted, 1 subnets
C      172.16.1.0 is directly connected, Serial2/0
S      192.168.1.0/24 [1/0] via 10.10.10.1
C      192.168.100.0/24 is directly connected, Loopback0
B      192.168.200.0/24 [20/0] via 172.16.1.2, 00:00:00

Router#
```

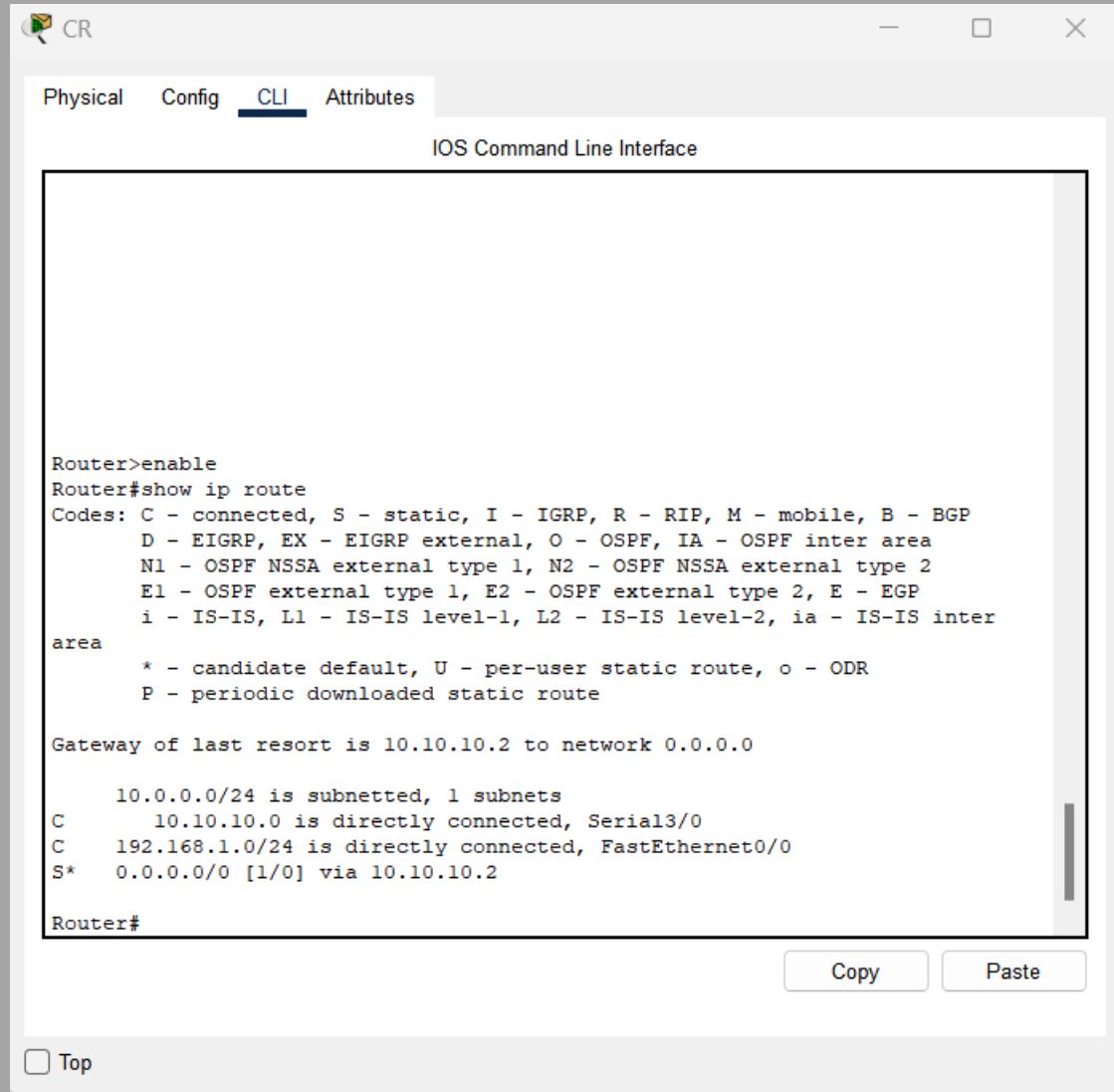
At the bottom of the terminal window, there are 'Copy' and 'Paste' buttons. Below the terminal window, there is a checkbox labeled 'Top'.

16- 192.168.200.0

17-on routage statique

b-non

C-



The screenshot shows a Cisco IOS Command Line Interface window. The window has a title bar with a Cisco logo and the text 'CR'. Below the title bar are four tabs: 'Physical', 'Config', 'CLI' (which is selected and underlined), and 'Attributes'. The main content area is titled 'IOS Command Line Interface' and contains the following text:

```
Router>enable
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is 10.10.10.2 to network 0.0.0.0



    10.0.0.0/24 is subnetted, 1 subnets
C      10.10.10.0 is directly connected, Serial3/0
C      192.168.1.0/24 is directly connected, FastEthernet0/0
S*     0.0.0.0/0 [1/0] via 10.10.10.2

Router#
```





At the bottom of the window, there are two buttons: 'Copy' and 'Paste'. Below the window, there is a checkbox labeled 'Top'.

Tâche 5 :

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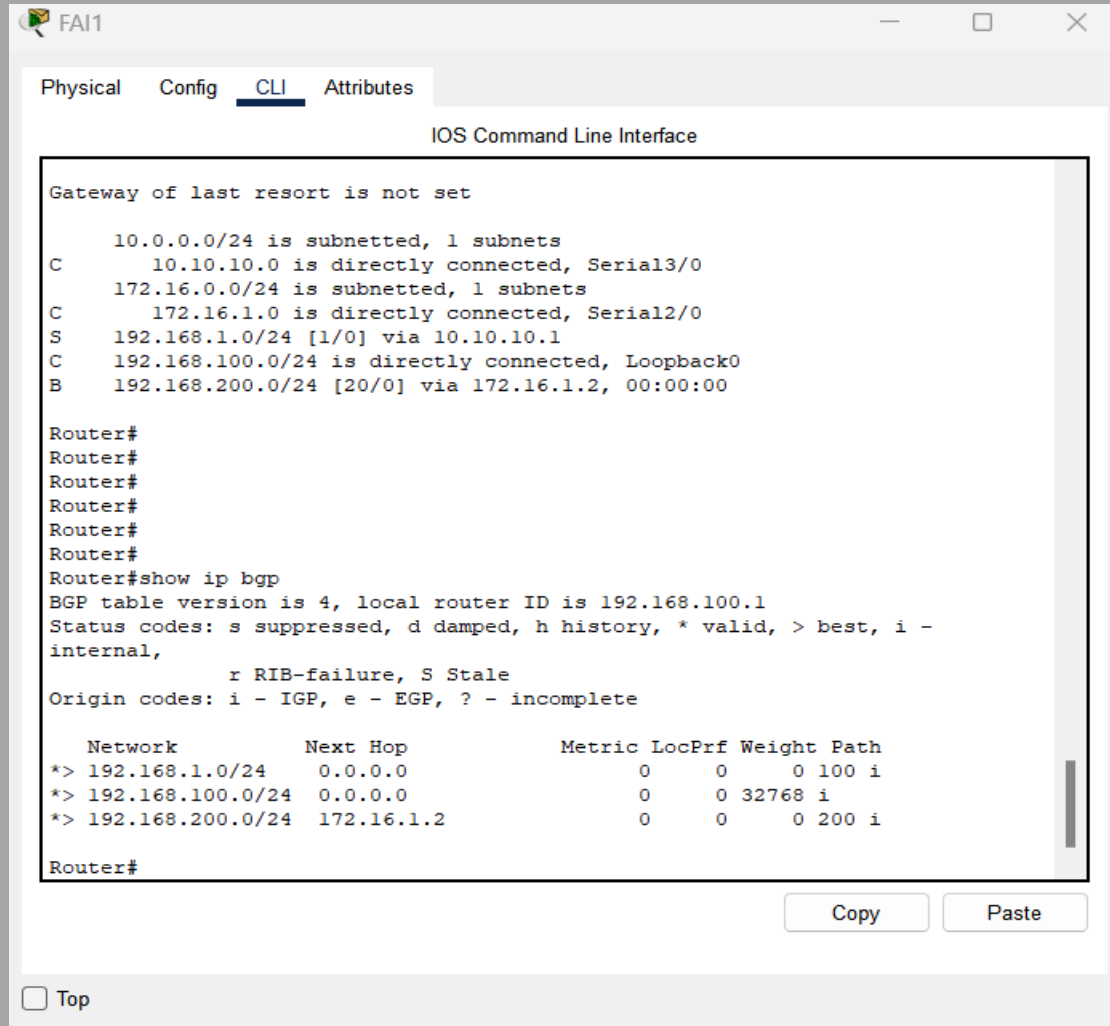
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	h1	FAI2	ICMP		0.000	N	0	(edit)	(delete)

21-

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	h1	FAI2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	FAI2	h1	ICMP		0.000	N	1	(edit)	(delete)

Tâche 6 :

22-



The screenshot shows a terminal window titled 'FAI1' with tabs for 'Physical', 'Config', 'CLI' (selected), and 'Attributes'. The main content area is titled 'IOS Command Line Interface' and displays the following text:

```
Gateway of last resort is not set

  10.0.0.0/24 is subnetted, 1 subnets
C    10.10.10.0 is directly connected, Serial3/0
  172.16.0.0/24 is subnetted, 1 subnets
C    172.16.1.0 is directly connected, Serial2/0
S    192.168.1.0/24 [1/0] via 10.10.10.1
C    192.168.100.0/24 is directly connected, Loopback0
B    192.168.200.0/24 [20/0] via 172.16.1.2, 00:00:00

Router#
Router#
Router#
Router#
Router#
Router#
Router#show ip bgp
BGP table version is 4, local router ID is 192.168.100.1
Status codes: s suppressed, d damped, h history, * valid, > best, i -
internal,
              r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network        Next Hop           Metric LocPrf Weight Path
*> 192.168.1.0/24   0.0.0.0                0      0      0 100 i
*> 192.168.100.0/24 0.0.0.0                0      0 32768 i
*> 192.168.200.0/24 172.16.1.2             0      0      0 200 i

Router#
```

At the bottom of the terminal window, there are 'Copy' and 'Paste' buttons. Below the terminal window, there is a checkbox labeled 'Top'.

24-par ce que on a un routage bgp entre FAI1 et FAI2

FAI2

Physical

Config

CLI

Attributes

IOS Command Line Interface

Press RETURN to get started.

Router>enable

Router#show ip bgp

BGP table version is 4, local router ID is 192.168.200.1

Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,

r RIB-failure, S Stale

Origin codes: i - IGP, e - EGP, ? - incomplete

Network	Next Hop	Metric	LocPrf	Weight	Path
*> 192.168.1.0/24	172.16.1.1	0	0	0 100	i
*> 192.168.100.0/24	172.16.1.1	0	0	0 100	i
*> 192.168.200.0/24	0.0.0.0	0	0	32768	i

Router#

Copy

Paste

☐ Top