

SISTEME DE OPERARE. INTERCONECTAREA SISTEMELOR DE CALCUL. INSTALARE SI CONFIGURARE

1. A. Adresa Ip v6: 2001:b30:1802:6:1198:3314:5a09:a92d
Adresa Ip v6: 2001:b30:5000:6:a1db:1215:bdb7:8695

```
Command Prompt
Microsoft Windows [Version 10.0.22621.2283]
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C:\Users\Varo.Do.Gabriela>ipconfig

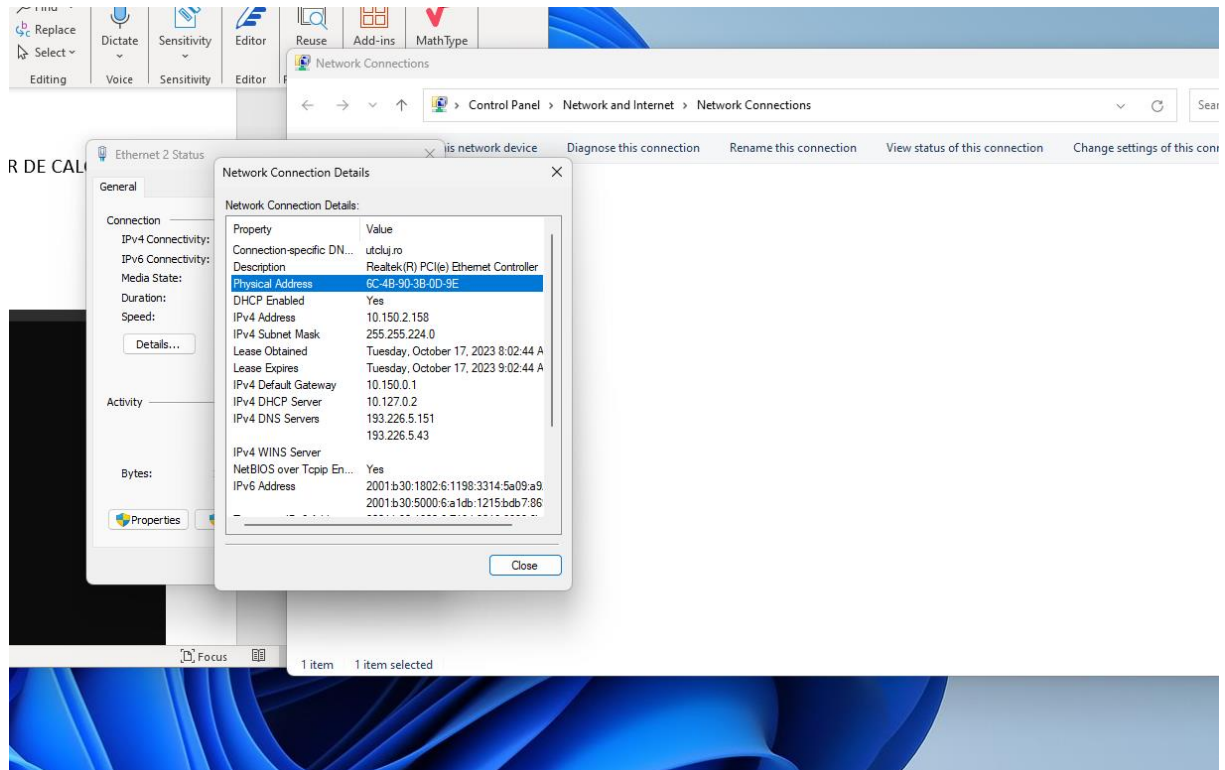
Windows IP Configuration

Ethernet adapter Ethernet 2:

    Connection-specific DNS Suffix  . : utcluj.ro
    IPv6 Address. . . . . : 2001:b30:1802:6:1198:3314:5a09:a92d
    IPv6 Address. . . . . : 2001:b30:5000:6:a1db:1215:bdb7:8695
    Temporary IPv6 Address. . . . . : 2001:b30:1802:6:718d:9016:6892:3b93
    Temporary IPv6 Address. . . . . : 2001:b30:5000:6:718d:9016:6892:3b93
    Link-local IPv6 Address . . . . . : fe80::8621:57a2:2e05:b609%13
    IPv4 Address. . . . . : 10.150.2.158
    Subnet Mask . . . . . : 255.255.224.0
    Default Gateway . . . . . : fe80::20c:29ff:feb7:ced8%13
                              fe80::36e5:ecff:fe05:7053%13
                              10.150.0.1

C:\Users\Varo.Do.Gabriela>
```

b. Adresa MAC: 6C-4B-90-3B-0D-9E



C. Tipuri de interfete de retea:

LAN – Local Area Network – ex: rețeaua ta (prin cablu) de acasă

MAN – Metropolitan Area Network – ex: rețeaua extinsă, pe suprafața unui oraș

WAN – Wide Area Network – ex: Internetul

WLAN – Wireless LAN – rețeaua ta, wireless, de acasă

D. Numărul de pachete transmise: 4

```
Command Prompt
Connection-specific DNS Suffix . : utcluj.ro
IPv6 Address. . . . . : 2001:b30:1802:6:1198:3314:5a09:a92d
IPv6 Address. . . . . : 2001:b30:5000:6:a1db:1215:bdb7:8695
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Default Gateway . . . . . : fe80::20c:29ff:feb7:ced8%13
                             fe80::36e5:ecff:fe05:7053%13
                             10.150.0.1

C:\Users\Varo.Do.Gabriela>2001:b30:1802:6:1198:3314:5a09:a92d
The filename, directory name, or volume label syntax is incorrect.

C:\Users\Varo.Do.Gabriela>ping 2001:b30:1802:6:1198:3314:5a09:a92d
Pinging 2001:b30:1802:6:1198:3314:5a09:a92d with 32 bytes of data:
Reply from 2001:b30:1802:6:1198:3314:5a09:a92d: time<1ms
Reply from 2001:b30:1802:6:1198:3314:5a09:a92d: time<1ms
Reply from 2001:b30:1802:6:1198:3314:5a09:a92d: time<1ms
Reply from 2001:b30:1802:6:1198:3314:5a09:a92d: time<1ms

Ping statistics for 2001:b30:1802:6:1198:3314:5a09:a92d:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Varo.Do.Gabriela>
```

E. Exemplificari de rute de conectivitate:

End-device (PC, Laptop, Smartphone, Servere etc.)

Switch – interconecteaza mai multe end-device-uri intr-o retea

Router – interconecteaza mai multe retele

Firewall – ne protejeaza reteaua de posibile atacuri din Internet

Mediu de transmisie – cablu (cupru), lumina (fibra optica), wireless (aer)

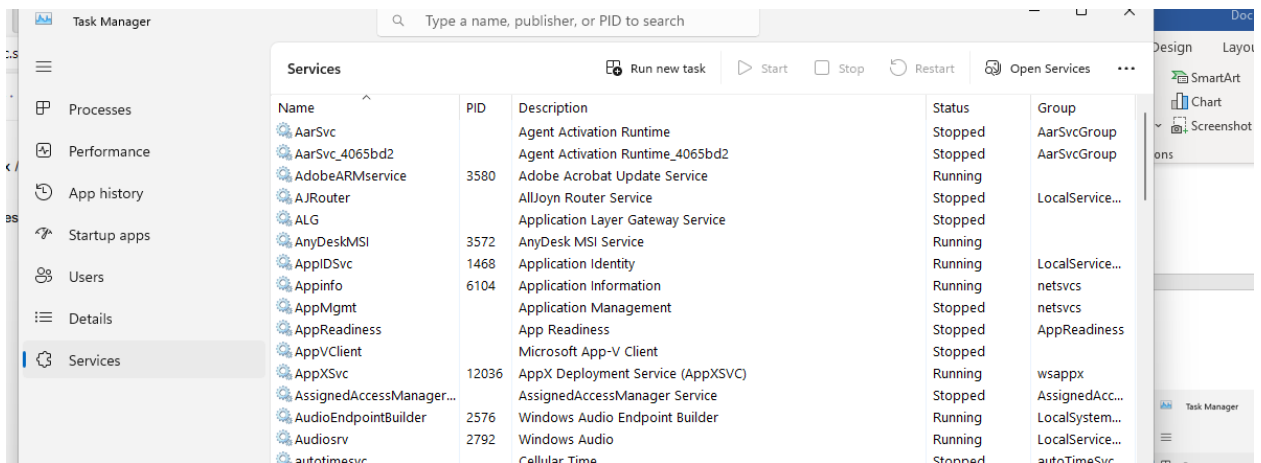
2. A. 3 procese in ordinea consumului de resurse:

NAME	5%CPU	84% MEMORY	1% DISK	0% NETWORK
Acrobat Update Service	0%	0.1 MB	0 MB/s	0 Mbps
Antimalware Service Executable	0.2%	122.4 MB	0 MB/s	0 MBps
AnyDesk(32 bit)	0%	122.4 MB	0 MS/s	0 MBps

Name	Status	5% CPU	84% Memory	1% Disk	0% Network
Apps (5)					
Microsoft Edge (15)		0%	450.6 MB	0.1 MB/s	0 Mbps
Microsoft Teams (8)		0%	307.3 MB	0 MB/s	0 Mbps
Microsoft Word (3)		0%	92.2 MB	0 MB/s	0 Mbps
Task Manager		4.1%	76.2 MB	0 MB/s	0 Mbps
Terminal (3)		0%	5.6 MB	0 MB/s	0 Mbps
Background processes (48)					
Acrobat Update Service		0%	0.1 MB	0 MB/s	0 Mbps
Antimalware Service Executable		0.2%	122.4 MB	0 MB/s	0 Mbps
AnyDesk (32 bit)		0%	0.7 MB	0 MB/s	0 Mbps
AnyDesk (32 bit)		0%	1.3 MB	0 MB/s	0 Mbps
Application Frame Host		0%	0.9 MB	0 MB/s	0 Mbps
Background Task Host (3)		0%	6.4 MB	0 MB/s	0 Mbps
COM Surrogate		0%	3.3 MB	0 MB/s	0 Mbps
COM Surrogate		0%	0.2 MB	0 MB/s	0 Mbps

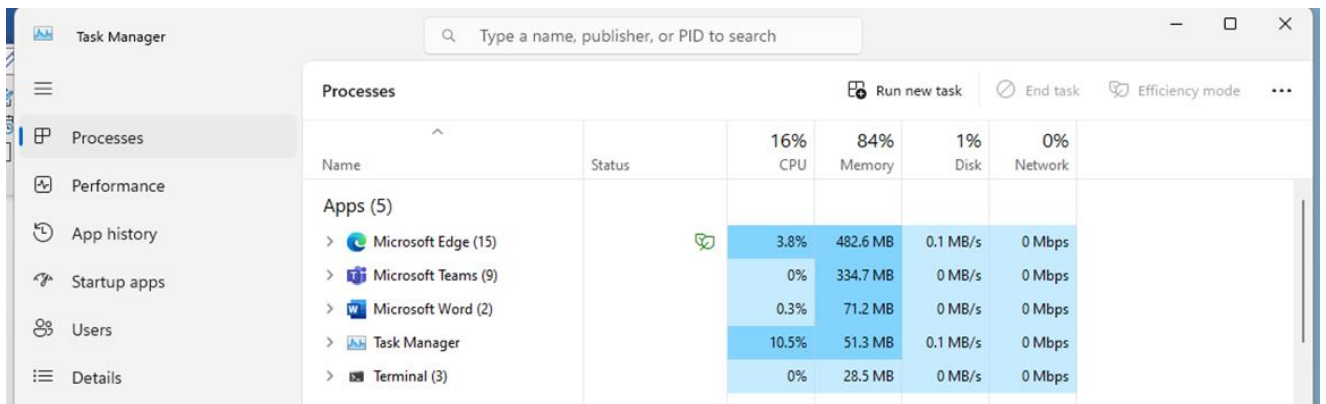
b. 3 servicii in ordinea cosmului de resurse:

NAME	PID	DESCRIPTION	STATUS	GROUP
AarSvc		Agent Activation Runtime	Stopped	AarSvcGroup
AarSvc_4065bd2		Agent Activation Runtime_4065bd2	Stopped	AarSvcGroup
AdobeARMservice	3580	Adobe Acrobat Update Service	Running	

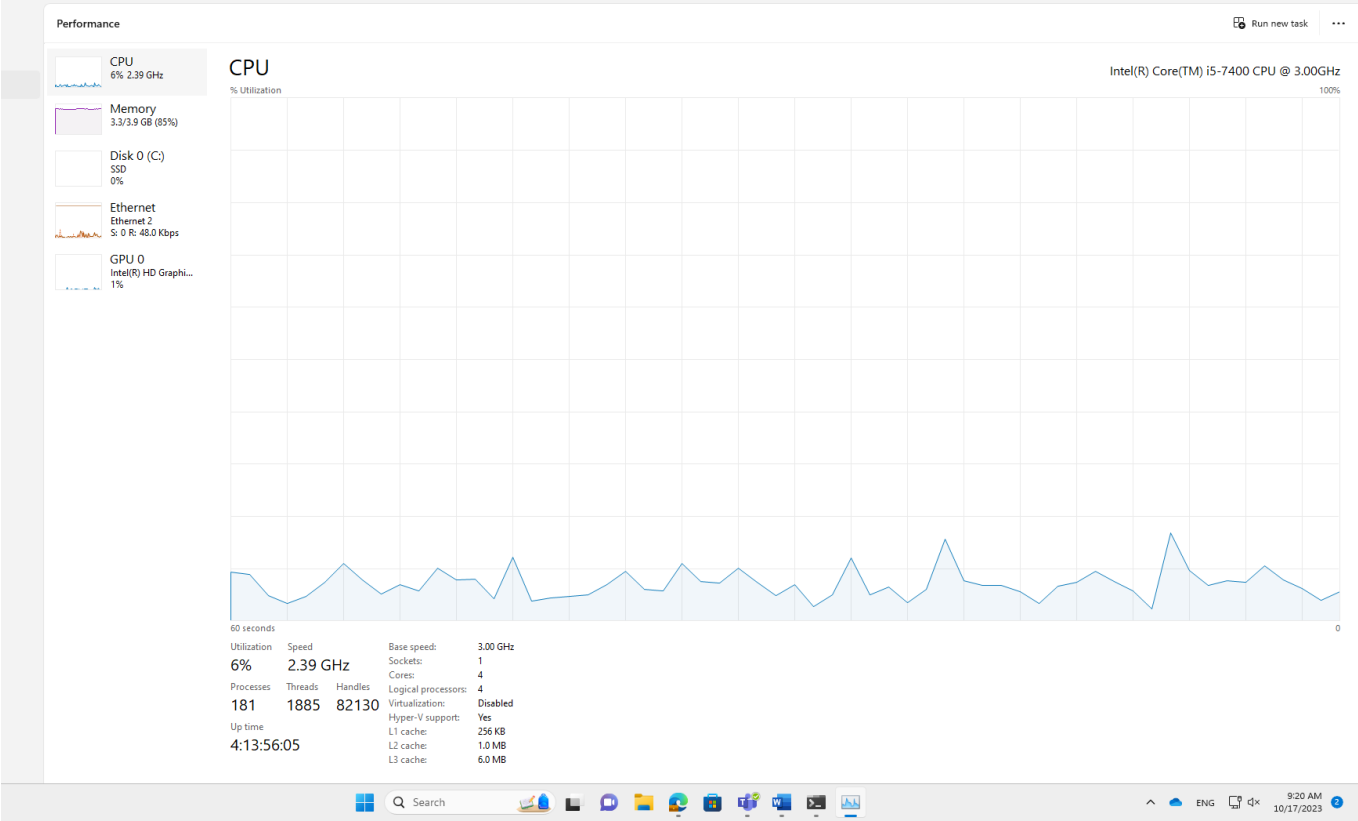


c. 3 aplicatii in ordinea consumului de resurse

NAME	CPU 16%	MEMORY 84%	DISK 1%	NETWORK 0%
Microsoft Edge	3.8%	482.6MB	0.1 MB/S	0 Mbps
Microsoft Teams	0%	334.7 MB	0 MB/s	0 MBps
Microsoft Word	0.3%	71.2 MB	0 MB/s	0 MBps



d. Performanta CPU:



e. Conexiuni in retea si specificatii

Task Manager

Type a name, publisher, or PID to search

Details

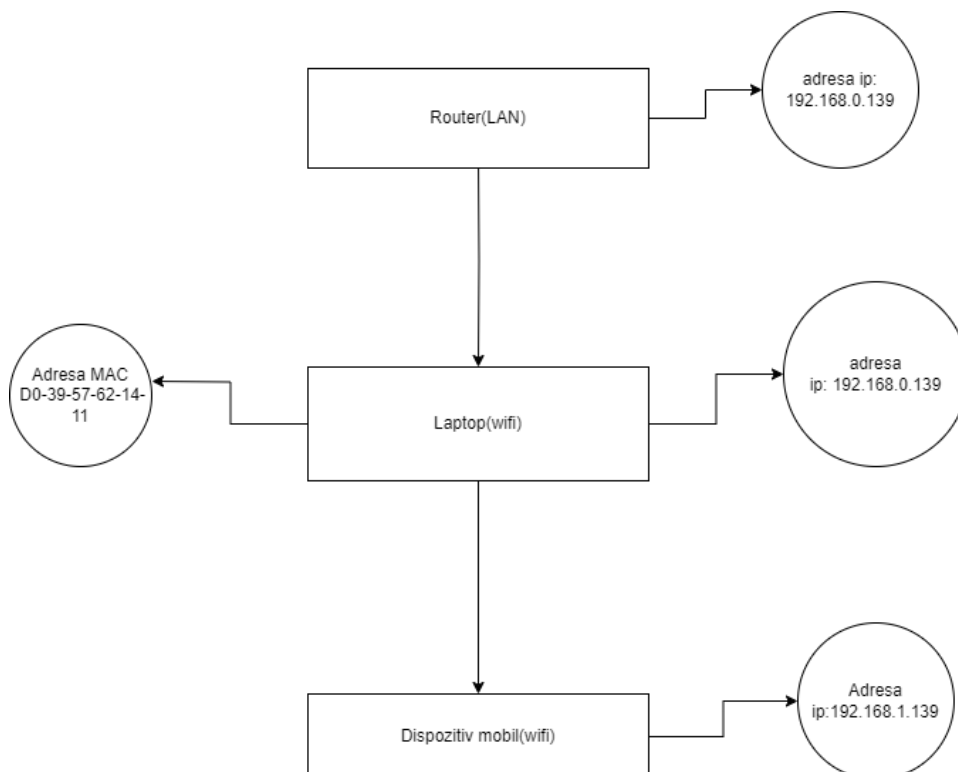
Name	PID	Status	User name	CPU	Memory (A...)	Archite...	Description
AggregatorHost.exe	5052	Running		0%	728 K	x64	AggregatorHost
ai.exe	2284	Running	Varo.Do.G...	0%	124 K	x64	Artificial Intelligence (AI) Host for the Microsoft® Windows® Operating System and Platform x64.
AnyDeskMsi.exe	5572	Running	Varo.Do.G...	0%	1,212 K	x86	AnyDesk
AnyDeskMsi.exe	4684	Running	Varo.Do.G...	0%	628 K	x86	AnyDesk
ApplicationFrameHo...	5684	Running	Varo.Do.G...	0%	844 K	x64	Application Frame Host
amsmvc.exe	3580	Running		0%	4 K		Amsvc
audiodev.exe	5448	Running		0%	3,820 K	x64	Windows Audio Device Graph Isolation
backgroundTaskHos...	10140	Suspended	Varo.Do.G...	0%	0 K	x64	Background Task Host
backgroundTaskHos...	12116	Suspended	Varo.Do.G...	0%	0 K	x64	Background Task Host
cmd.exe	8464	Running	Varo.Do.G...	0%	0 K	x64	Windows Command Processor
conhost.exe	7428	Running	Varo.Do.G...	0%	4 K	x64	Console Window Host
curs.exe	676	Running		0%	456 K		Curs
curs.exe	12326	Running		0%	1,036 K		Curs
ctfmon.exe	2228	Running	Varo.Do.G...	0%	2,408 K	x64	CTF Loader
dllhost.exe	4932	Running		0%	184 K		Dllhost
dllhost.exe	3924	Running	Varo.Do.G...	0%	2,424 K	x64	COM Surrogate
dwm.exe	9096	Running		0%	37,372 K		Dwm
explorer.exe	10652	Running	Varo.Do.G...	0%	27,512 K	x64	Windows Explorer
Fidsynchelper.exe	11808	Running		0%	1,600 K		Fidsynchelper
fontdrvhost.exe	764	Running		0%	4 K		Fontdrvhost
fontdrvhost.exe	9684	Running		0%	456 K		Fontdrvhost
IghCUIService.exe	2478	Running		0%	4 K		IghCUIService
iglmEM.exe	10648	Running	Varo.Do.G...	0%	68 K	x64	iglmEM Module
IntelCpuHDPSvc.exe	1572	Running		0%	4 K		IntelCpuHDPSvc
IntelCpuTxCSvc.exe	1756	Running		0%	0 K		IntelCpuTxCSvc
jhi_service.exe	3888	Running		0%	0 K		Jhi_service
lssass.exe	856	Running		0%	5,668 K		Lsass
Microsoft.Managem...	4568	Running		0%	8,900 K		Microsoft.Management.Services.Intune.WindowsAgent
msofft.exe	1256	Running		0%	0 K		Mofc
msedge.exe	1084	Running	Varo.Do.G...	0%	33,124 K	x64	Microsoft Edge
msedge.exe	10516	Running	Varo.Do.G...	0%	36,880 K	x64	Microsoft Edge
msedge.exe	12882	Running	Varo.Do.G...	0%	63,200 K	x64	Microsoft Edge
msedge.exe	3960	Running	Varo.Do.G...	0%	58,136 K	x64	Microsoft Edge
msedge.exe	3476	Running	Varo.Do.G...	0%	15,884 K	x64	Microsoft Edge
msedge.exe	4712	Running	Varo.Do.G...	0%	7,980 K	x64	Microsoft Edge
msedge.exe	10672	Running	Varo.Do.G...	0%	77,482 K	x64	Microsoft Edge
msedge.exe	12112	Running	Varo.Do.G...	0%	69,360 K	x64	Microsoft Edge
msedge.exe	10916	Running	Varo.Do.G...	0%	55,700 K	x64	Microsoft Edge
msedge.exe	4232	Running	Varo.Do.G...	0%	456 K	x64	Microsoft Edge
msedge.exe	5568	Running	Varo.Do.G...	0%	82,544 K	x64	Microsoft Edge
msedge.exe	11480	Running	Varo.Do.G...	0%	12,982 K	x64	Microsoft Edge
msedge.exe	11852	Running	Varo.Do.G...	0%	1,644 K	x64	Microsoft Edge
msedge.exe	3912	Running	Varo.Do.G...	0%	1,504 K	x64	Microsoft Edge
msedge.exe	7568	Running	Varo.Do.G...	0%	528 K	x64	Microsoft Edge
msedgeviewwin2.exe	11528	Running	Varo.Do.G...	0%	36,504 K	x64	Microsoft Edge WebView2
msedgeviewwin2.exe	2500	Running	Varo.Do.G...	0%	74,764 K	x64	Widgets - WebView2: Widgets
msedgeviewwin2.exe	5628	Running	Varo.Do.G...	0%	14,264 K	x64	Widgets - WebView2 Manager
msedgeviewwin2.exe	13240	Running	Varo.Do.G...	0%	436 K	x64	Widgets - Microsoft Edge WebView2

1°C Partly sunny

Search

ENG 10/17/2023 9:42 AM

3.



4.1.

dimensiunea imaginii= $1600 \times 1200 \times 8 = 15.360.000$ biti

a. 56 kbps(modem):

$T = 15.360.000 \text{ biti} / 56.000 \text{ biti/sec} = 274,28 \text{ sec}$

b.1mbps(modem)

$T = 15.360.000 \text{ biti} / 1.000.000 \text{ biti/sec} = 15,36 \text{ sec}$

c.10mbps(ethernet)

$T = 15.360.000 \text{ biti} / 10.000.000 \text{ biti/sec} = 1,536 \text{ sec}$

d.100mbps(ethernet)

$T = 15.360.000 \text{ biti} / 100.000.000 \text{ biti/sec} = 0,1536 \text{ sec}$

e.1 gigabit(ethernet)

$T = 15.360.000 \text{ biti} / 1.000.000.000 \text{ biti/sec} = 0.01536 \text{ sec}$

4.2. Există 4 tipuri de linii de transmisie între fiecare dintre cele 5 echipamente de tip router: viteză ridicată, viteză medie, viteză redusă și fără transmisie. Prin urmare, există $4^5 = 1024$ de topologii posibile.

Timp total = $1024 \text{ topologii} \times 100 \text{ ms/topologie} = 102400 \text{ ms} = 102,4 \text{ secunde}$