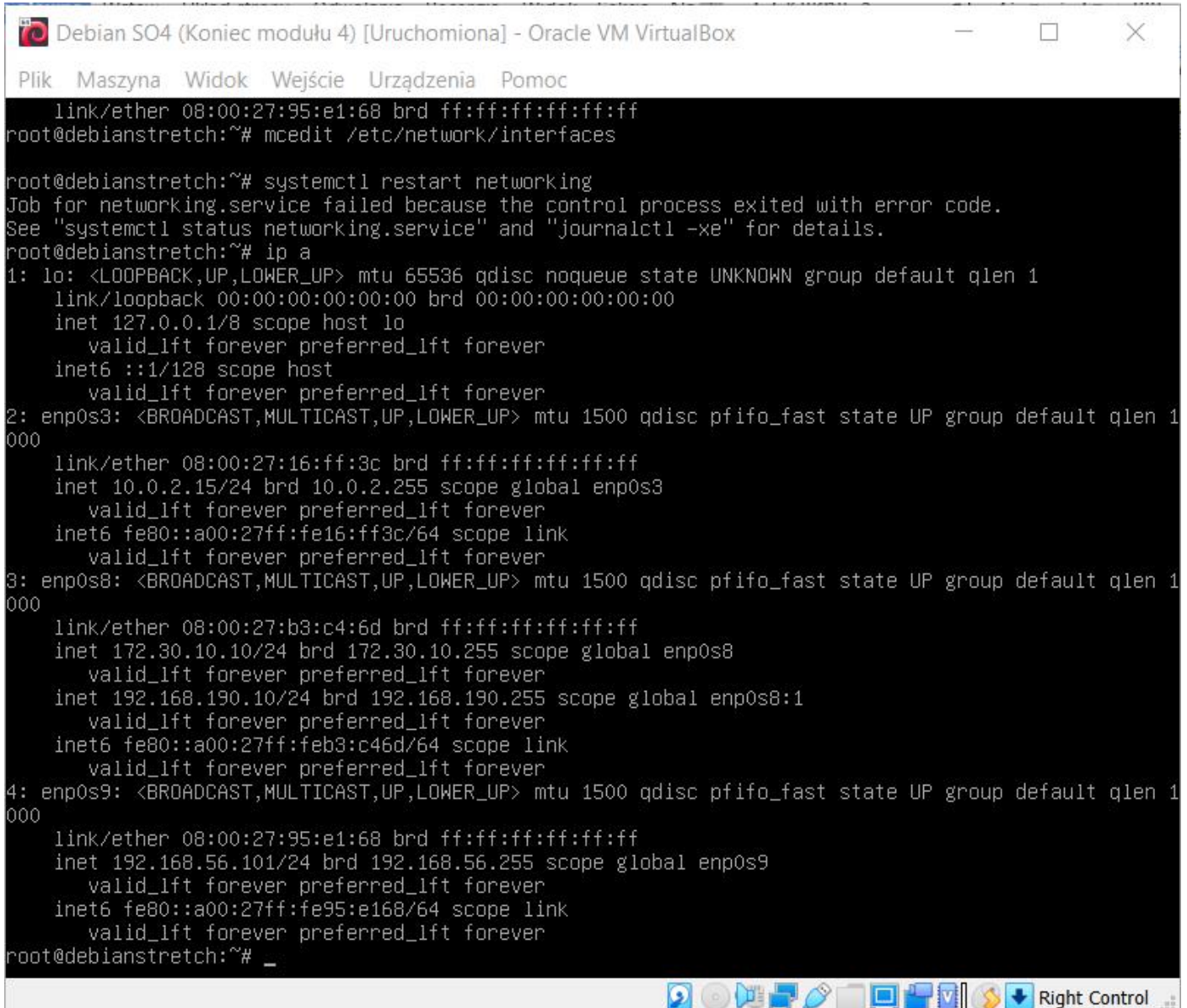


Zadanie domowe 4
Adam Stanek

1.



```
Debian SO4 (Koniec modułu 4) [Uruchomiona] - Oracle VM VirtualBox
Plik Maszyna Widok Wejście Urządzenia Pomoc
link/ether 08:00:27:95:e1:68 brd ff:ff:ff:ff:ff:ff
root@debianstretch:~# mcedit /etc/network/interfaces

root@debianstretch:~# systemctl restart networking
Job for networking.service failed because the control process exited with error code.
See "systemctl status networking.service" and "journalctl -xe" for details.
root@debianstretch:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1
000
    link/ether 08:00:27:16:ff:3c brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global enp0s3
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe16:ff3c/64 scope link
        valid_lft forever preferred_lft forever
3: enp0s8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1
000
    link/ether 08:00:27:b3:c4:6d brd ff:ff:ff:ff:ff:ff
    inet 172.30.10.10/24 brd 172.30.10.255 scope global enp0s8
        valid_lft forever preferred_lft forever
    inet 192.168.190.10/24 brd 192.168.190.255 scope global enp0s8:1
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:feb3:c46d/64 scope link
        valid_lft forever preferred_lft forever
4: enp0s9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1
000
    link/ether 08:00:27:95:e1:68 brd ff:ff:ff:ff:ff:ff
    inet 192.168.56.101/24 brd 192.168.56.255 scope global enp0s9
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe95:e168/64 scope link
        valid_lft forever preferred_lft forever
root@debianstretch:~# _
```



Plik Maszyna Widok Wejście Urządzenia Pomoc

```
RX packets 233 bytes 52765 (51.5 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 235 bytes 21468 (20.9 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 172.30.10.20 netmask 255.255.255.0 broadcast 172.30.10.255
inet6 fe80::a00:27ff:fe40:642a prefixlen 64 scopeid 0x20<link>
ether 08:00:27:40:64:2a txqueuelen 1000 (Ethernet)
RX packets 12 bytes 4104 (4.0 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 26 bytes 2064 (2.0 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8:1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.190.20 netmask 255.255.255.0 broadcast 192.168.190.255
ether 08:00:27:40:64:2a txqueuelen 1000 (Ethernet)

enp0s9: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.56.103 netmask 255.255.255.0 broadcast 192.168.56.255
inet6 fe80::f0d6:92cd:799:bf83 prefixlen 64 scopeid 0x20<link>
ether 08:00:27:4b:20:07 txqueuelen 1000 (Ethernet)
RX packets 260 bytes 39934 (38.9 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 30 bytes 5384 (5.2 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 16 bytes 1224 (1.1 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 16 bytes 1224 (1.1 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@fedora28-srv ~]#
```



Right Control



Plik Maszyna Widok Wejście Urządzenia Pomoc

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```
[root@fedora28-srv ~]# ping 10.0.2.15
PING 10.0.2.15 (10.0.2.15) 56(84) bytes of data.
64 bytes from 10.0.2.15: icmp_seq=1 ttl=64 time=0.043 ms
64 bytes from 10.0.2.15: icmp_seq=2 ttl=64 time=0.048 ms
64 bytes from 10.0.2.15: icmp_seq=3 ttl=64 time=0.048 ms
^C
--- 10.0.2.15 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2060ms
rtt min/avg/max/mdev = 0.043/0.046/0.048/0.006 ms
[root@fedora28-srv ~]# ping 192.168.56.101
PING 192.168.56.101 (192.168.56.101) 56(84) bytes of data.
64 bytes from 192.168.56.101: icmp_seq=1 ttl=64 time=0.750 ms
64 bytes from 192.168.56.101: icmp_seq=2 ttl=64 time=0.399 ms
^C
--- 192.168.56.101 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.399/0.574/0.750/0.177 ms
[root@fedora28-srv ~]# ping 172.30.10.10
PING 172.30.10.10 (172.30.10.10) 56(84) bytes of data.
64 bytes from 172.30.10.10: icmp_seq=1 ttl=64 time=0.654 ms
64 bytes from 172.30.10.10: icmp_seq=2 ttl=64 time=0.331 ms
^C
--- 172.30.10.10 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.331/0.492/0.654/0.163 ms
[root@fedora28-srv ~]# ping 192.168.190.10
PING 192.168.190.10 (192.168.190.10) 56(84) bytes of data.
64 bytes from 192.168.190.10: icmp_seq=1 ttl=64 time=0.438 ms
64 bytes from 192.168.190.10: icmp_seq=2 ttl=64 time=0.420 ms
64 bytes from 192.168.190.10: icmp_seq=3 ttl=64 time=0.353 ms
^C
--- 192.168.190.10 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 0.353/0.403/0.438/0.043 ms
[root@fedora28-srv ~]#
```



```

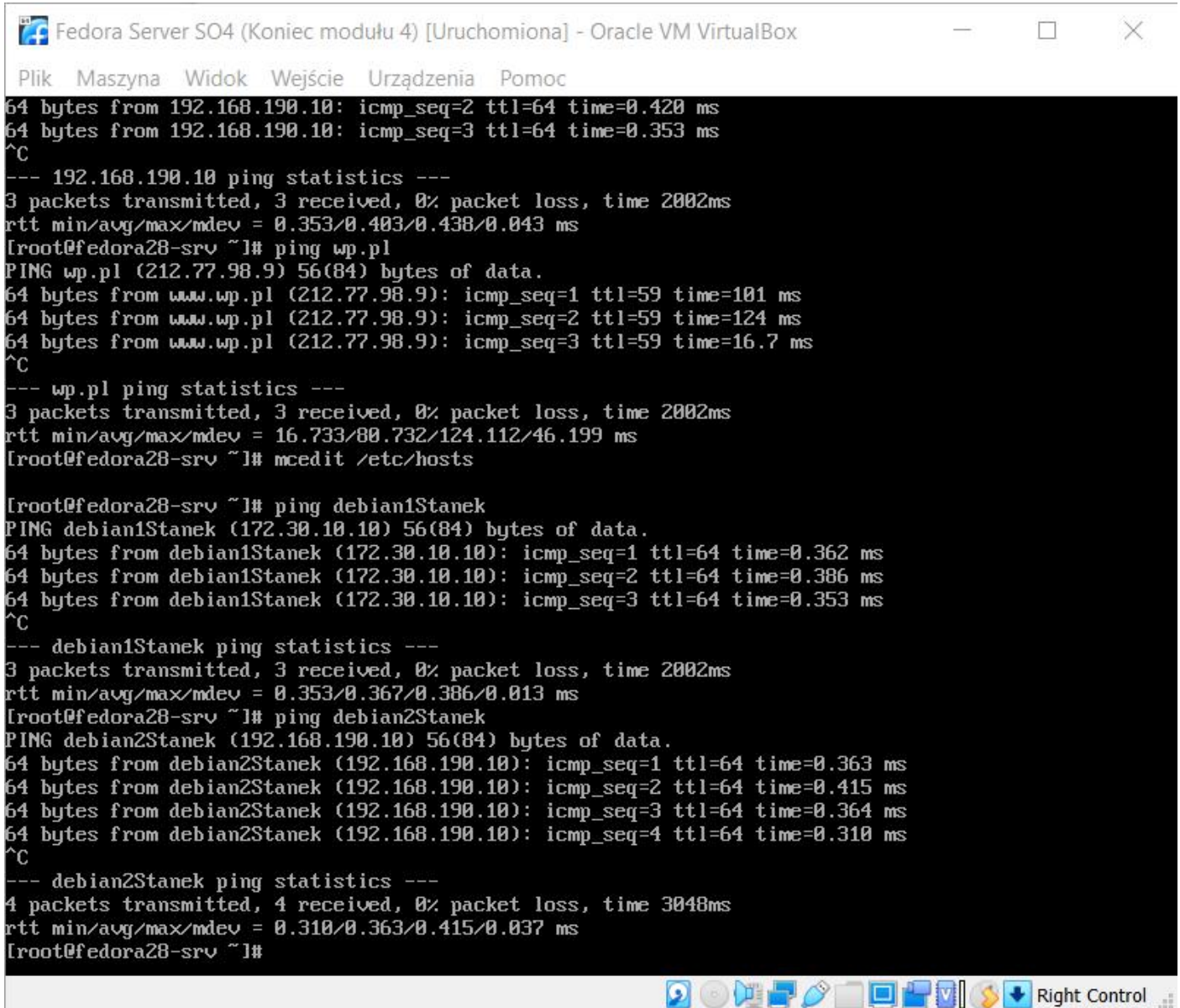
inet 192.168.56.101/24 brd 192.168.56.255 scope global enp0s9
    valid_lft forever preferred_lft forever
inet6 fe80::a00:27ff:fe95:e168/64 scope link
    valid_lft forever preferred_lft forever
root@debianstretch:~# ping 10.0.2.15
PING 10.0.2.15 (10.0.2.15) 56(84) bytes of data.
64 bytes from 10.0.2.15: icmp_seq=1 ttl=64 time=0.030 ms
64 bytes from 10.0.2.15: icmp_seq=2 ttl=64 time=0.027 ms
^C
--- 10.0.2.15 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.027/0.028/0.030/0.005 ms
root@debianstretch:~# ping 172.30.10.20
PING 172.30.10.20 (172.30.10.20) 56(84) bytes of data.
64 bytes from 172.30.10.20: icmp_seq=1 ttl=64 time=0.381 ms
64 bytes from 172.30.10.20: icmp_seq=2 ttl=64 time=0.397 ms
^C
--- 172.30.10.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.381/0.389/0.397/0.008 ms
root@debianstretch:~# ping 192.168.190.20
PING 192.168.190.20 (192.168.190.20) 56(84) bytes of data.
64 bytes from 192.168.190.20: icmp_seq=1 ttl=64 time=0.456 ms
64 bytes from 192.168.190.20: icmp_seq=2 ttl=64 time=0.376 ms
^C
--- 192.168.190.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1000ms
rtt min/avg/max/mdev = 0.376/0.416/0.456/0.040 ms
root@debianstretch:~# ping 192.168.56.103
PING 192.168.56.103 (192.168.56.103) 56(84) bytes of data.
64 bytes from 192.168.56.103: icmp_seq=1 ttl=64 time=0.415 ms
64 bytes from 192.168.56.103: icmp_seq=2 ttl=64 time=0.376 ms
^C
--- 192.168.56.103 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1032ms
rtt min/avg/max/mdev = 0.376/0.395/0.415/0.027 ms
root@debianstretch:~#

```




```
PS Office Domowe 4.docx Debian SO4 (Koniec modułu 4) [Uruchomiona] - Oracle VM VirtualBox
Menu Plik Maszyna Widok Wejście Urządzenia Pomoc
Wynij Kopiuj Malarz formatów
Fedora Server SO4 (Koniec r
Plik Maszyna Widok Wejście
10.0.2.15 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.027/0.028/0.030/0.005 ms
root@debianstretch:~# ping 172.30.10.20
PING 172.30.10.20 (172.30.10.20) 56(84) bytes of data.
64 bytes from 172.30.10.20: icmp_seq=1 ttl=64 time=0.381 ms
64 bytes from 172.30.10.20: icmp_seq=2 ttl=64 time=0.397 ms
^C
--- 172.30.10.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.381/0.389/0.397/0.008 ms
root@debianstretch:~# ping 192.168.190.20
PING 192.168.190.20 (192.168.190.20) 56(84) bytes of data.
64 bytes from 192.168.190.20: icmp_seq=1 ttl=64 time=0.456 ms
64 bytes from 192.168.190.20: icmp_seq=2 ttl=64 time=0.376 ms
^C
--- 192.168.190.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1000ms
rtt min/avg/max/mdev = 0.376/0.416/0.456/0.040 ms
root@debianstretch:~# ping 192.168.56.103
PING 192.168.56.103 (192.168.56.103) 56(84) bytes of data.
64 bytes from 192.168.56.103: icmp_seq=1 ttl=64 time=0.415 ms
64 bytes from 192.168.56.103: icmp_seq=2 ttl=64 time=0.376 ms
^C
--- 192.168.56.103 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1032ms
rtt min/avg/max/mdev = 0.376/0.395/0.415/0.027 ms
root@debianstretch:~# ping onet.pl
PING onet.pl (213.180.141.140) 56(84) bytes of data.
64 bytes from sg1.any.onet.pl (213.180.141.140): icmp_seq=1 ttl=57 time=56.2 ms
64 bytes from sg1.any.onet.pl (213.180.141.140): icmp_seq=2 ttl=57 time=18.3 ms
^C
--- onet.pl ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 18.308/37.300/56.293/18.993 ms
root@debianstretch:~# _
root@fedora28-srv ~]# ping wp.pl
PING wp.pl (212.77.98.9) 56(84) bytes of data.
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=1 ttl=59 time=101 ms
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=2 ttl=59 time=124 ms
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=3 ttl=59 time=16.7 ms
^C
--- wp.pl ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 16.733/80.732/124.112/46.199 ms
root@fedora28-srv ~]#
```

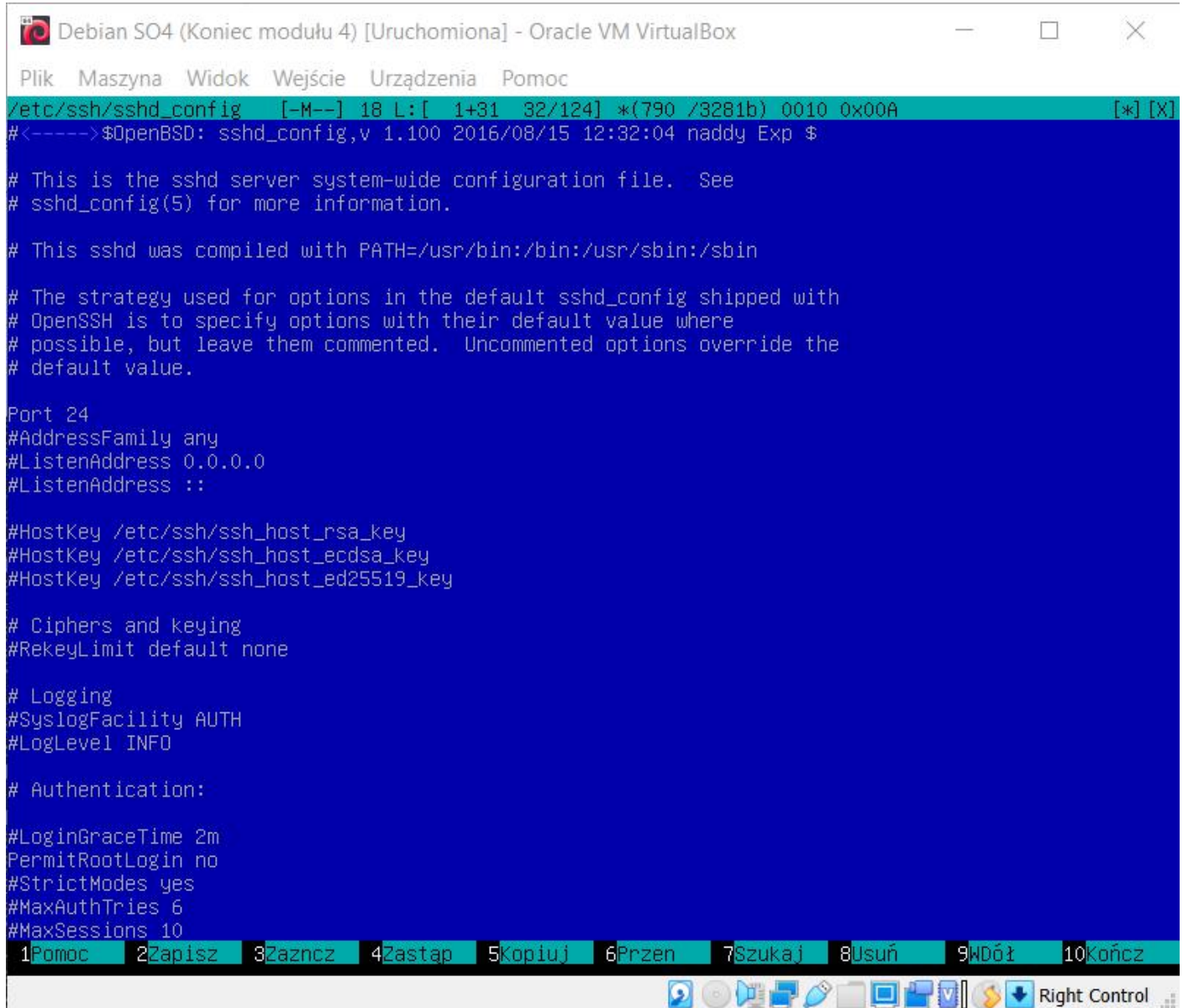
2.



```
Fedora Server SO4 (Koniec modułu 4) [Uruchomiona] - Oracle VM VirtualBox
Plik Maszyna Widok Wejście Urządzenia Pomoc
64 bytes from 192.168.190.10: icmp_seq=2 ttl=64 time=0.420 ms
64 bytes from 192.168.190.10: icmp_seq=3 ttl=64 time=0.353 ms
^C
--- 192.168.190.10 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 0.353/0.403/0.438/0.043 ms
[root@fedora28-srv ~]# ping wp.pl
PING wp.pl (212.77.98.9) 56(84) bytes of data.
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=1 ttl=59 time=101 ms
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=2 ttl=59 time=124 ms
64 bytes from www.wp.pl (212.77.98.9): icmp_seq=3 ttl=59 time=16.7 ms
^C
--- wp.pl ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 16.733/80.732/124.112/46.199 ms
[root@fedora28-srv ~]# mcedit /etc/hosts

[root@fedora28-srv ~]# ping debian1Stanek
PING debian1Stanek (172.30.10.10) 56(84) bytes of data.
64 bytes from debian1Stanek (172.30.10.10): icmp_seq=1 ttl=64 time=0.362 ms
64 bytes from debian1Stanek (172.30.10.10): icmp_seq=2 ttl=64 time=0.386 ms
64 bytes from debian1Stanek (172.30.10.10): icmp_seq=3 ttl=64 time=0.353 ms
^C
--- debian1Stanek ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 0.353/0.367/0.386/0.013 ms
[root@fedora28-srv ~]# ping debian2Stanek
PING debian2Stanek (192.168.190.10) 56(84) bytes of data.
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=1 ttl=64 time=0.363 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=2 ttl=64 time=0.415 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=3 ttl=64 time=0.364 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=4 ttl=64 time=0.310 ms
^C
--- debian2Stanek ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3048ms
rtt min/avg/max/mdev = 0.310/0.363/0.415/0.037 ms
[root@fedora28-srv ~]#
```

3.



The screenshot shows a terminal window titled "Debian SO4 (Koniec modułu 4) [Uruchomiona] - Oracle VM VirtualBox". The terminal displays the contents of the `/etc/ssh/sshd_config` file. The file is a configuration for the OpenSSH daemon, including comments, port settings, and authentication options. At the bottom of the terminal, there is a menu bar with 10 numbered items: 1Pomoc, 2Zapisz, 3Zaznacz, 4Zastap, 5Kopiuuj, 6Przen, 7Szukaj, 8Usuń, 9Wdół, and 10Kończ. The bottom status bar shows various icons and the text "Right Control".

```
Debian SO4 (Koniec modułu 4) [Uruchomiona] - Oracle VM VirtualBox
Plik Maszyna Widok Wejście Urządzenia Pomoc
/etc/ssh/sshd_config [-M--] 18 L:[ 1+31 32/124] *(790 /3281b) 0010 0x00A [*] [X]
#<---->$OpenBSD: sshd_config,v 1.100 2016/08/15 12:32:04 naddy Exp $

# This is the sshd server system-wide configuration file.  See
# sshd_config(5) for more information.

# This sshd was compiled with PATH=/usr/bin:/bin:/usr/sbin:/sbin

# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented.  Uncommented options override the
# default value.

Port 22
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
PermitRootLogin no
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10
1Pomoc 2Zapisz 3Zaznacz 4Zastap 5Kopiuuj 6Przen 7Szukaj 8Usuń 9Wdół 10Kończ
Right Control
```

```
root@debianstretch:~# ping 192.168.56.103
PING 192.168.56.103 (192.168.56.103) 56(84) bytes of data.
64 bytes from 192.168.56.103: icmp_seq=1 ttl=64 time=0.415 ms
64 bytes from 192.168.56.103: icmp_seq=2 ttl=64 time=0.376 ms
^C
--- 192.168.56.103 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1032ms
rtt min/avg/max/mdev = 0.376/0.395/0.415/0.027 ms
root@debianstretch:~# ping onet.pl
PING onet.pl (213.180.141.140) 56(84) bytes of data.
64 bytes from sg1.any.onet.pl (213.180.141.140): icmp_seq=1 ttl=57 time=56.2 ms
64 bytes from sg1.any.onet.pl (213.180.141.140): icmp_seq=2 ttl=57 time=18.3 ms
^C
--- onet.pl ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 18.308/37.300/56.293/18.993 ms
root@debianstretch:~# mcedit /etc/ssh/sshd_config

root@debianstretch:~# systemctl restart ssh
root@debianstretch:~# adduser adamstaneK
Dodawanie użytkownika "adamstaneK"...
Dodawanie nowej grupy "adamstaneK" (1001)...
Dodawanie nowego użytkownika "adamstaneK" (1001) w grupie "adamstaneK"...
Tworzenie katalogu domowego "/home/adamstaneK"...
Kopiowanie plików z "/etc/skel" ...
Proszę podać nowe hasło UNIX:
Proszę ponownie podać hasło UNIX:
passwd: hasło zostało zmienione
Zmieniam informację o użytkowniku adamstaneK
Wpisz nową wartość lub wciśnij ENTER by przyjąć wartość domyślną
    Imię i nazwisko []: Adam Stanek
    Numer pokoju []:
    Telefon do pracy []:
    Telefon domowy []:
    Inne []:
Czy informacja jest poprawna? [T/n] T
root@debianstretch:~#
```


Plik Maszyna Widok Wejście Urządzenia Pomoc

```

64 bytes from debian2Stanek (192.168.190.10): icmp_seq=1 ttl=64 time=0.363 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=2 ttl=64 time=0.415 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=3 ttl=64 time=0.364 ms
64 bytes from debian2Stanek (192.168.190.10): icmp_seq=4 ttl=64 time=0.310 ms
^C
--- debian2Stanek ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3048ms
rtt min/avg/max/mdev = 0.310/0.363/0.415/0.037 ms
[root@fedora28-srv ~]# ssh -p 24 adamstanek@debian1Stanek
The authenticity of host '[debian1stanek]:24 ([172.30.10.10]:24)' can't be established.
ECDSA key fingerprint is SHA256:98hIFGTcoDoH1Sir0lylvpP1KoqSvqcr+6aSEZxfp24.
ECDSA key fingerprint is MD5:77:e3:6f:d8:3f:26:b0:84:2c:b7:a2:79:4e:06:47:89.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '[debian1stanek]:24,[172.30.10.10]:24' (ECDSA) to the list of known hosts
.
adamstanek@debian1stanek's password:
Linux debianstretch 4.9.0-3-amd64 #1 SMP Debian 4.9.30-2+deb9u3 (2017-08-06) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
adamstanek@debianstretch:~$ su
Hasło:
root@debianstretch:/home/adamstanek# exit
exit
adamstanek@debianstretch:~$ exit
wylogowanie
Connection to debian1stanek closed.
[root@fedora28-srv ~]# ssh -p 24 root@debian1Stanek
root@debian1stanek's password:
Permission denied, please try again.
root@debian1stanek's password:

[root@fedora28-srv ~]#

```

Right Control

adamstanek@debianstretch: ~

```

PS C:\WINDOWS\system32> ssh -p 24 adamstanek@192.168.56.101
The authenticity of host '[192.168.56.101]:24 ([192.168.56.101]:24)' can't be established.
ECDSA key fingerprint is SHA256:98hIFGTcoDoH1Sir0lylvpP1KoqSvqcr+6aSEZxfp24.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '[192.168.56.101]:24' (ECDSA) to the list of known hosts.
adamstanek@192.168.56.101's password:
Linux debianstretch 4.9.0-3-amd64 #1 SMP Debian 4.9.30-2+deb9u3 (2017-08-06) x86_64Linux debianstretch 4.9.0-3-amd64 #1
SMP Debian 4.9.30-2+deb9u3 (2017-08-06) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Fri Dec 11 20:35:59 2020 from 172.30.10.20
adamstanek@debianstretch: $ su
Hasło:
root@debianstretch:/home/adamstanek#

```

