

Отчет по лабораторной работе № 3 по курсу Архитектура компьютера и информационных сетей

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Преподаватель: доцент Никулин С.П.

Входной контроль знаний с оценкой _____

Отчет сдан « » _____ 202__ г., итоговая оценка ____

Подпись преподавателя _____

1. **Тема:** Сети и телекоммуникации в ОС UNIX
2. **Цель работы:** Изучить как происходит взаимодействие между ОС UNIX и сетью (всемирной и локальной)
3. **Задание (вариант №): Попробовать поработать с файлами на удаленной машине, изучить команды коммуникации различных машин**
4. **Оборудование (лабораторное):**
ЭВМ _____, процессор _____, имя узла сети _____ с ОП _____ Мб,
НМД _____ Мб. Терминал _____ адрес _____. Принтер _____
Другие устройства _____

Оборудование ПЭВМ студента, если использовалось:

Процессор AMD Ryzen 5600H с ОП 16 ГБ НМД SSD 1 ТБ . Монитор Встроенный 1920x1080

Другие устройства Touchpad Synaptics

5. **Программное обеспечение (лабораторное):**
Операционная система семейства _____, наименование _____ версия _____
интерпретатор команд _____ версия _____
Система программирования _____ версия _____
Редактор текстов _____ версия _____
Утилиты операционной системы _____
Прикладные системы и программы _____
Местонахождение и имена файлов программ и данных _____
Программное обеспечение ЭВМ студента, если использовалось:
Операционная система семейства Windows 11 (UNIX WSL2) _____, наименование Pop!_OS версия 22.04 jammy
интерпретатор команд bash версия 5.1.16
Система программирования _____ версия _____
Редактор текстов _____ версия _____
Утилиты операционной системы who, ruptime, ping, exit
Прикладные системы и программы ssh, scp, rsync, sftp, pax, tar, mail, gzip, bzip2, dict
Местонахождение и имена файлов программ и данных на домашнем компьютере _____

6. Идея, метод, алгоритм решение задачи (в формах: словесной, псевдокода, графической [блок-схема, диаграмма, рисунок, таблица] или формальные спецификации с пред- и постусловиями)

ping [ipv4] - отправить запрос на IP-адрес

ssh [ipv4] - безопасное подключение к удаленной машине по ее адресу

who - вывод активных пользователей

uptime - вывод время работы всех пользователей в сети

exit - закрытие терминала

scp (-r) [filename1] [filename2] - безопасное копирование файлов (каталога) с удаленной машины (на нее)

rsync [filename1] [filename2] - инструмент копирования файлов (каталогов) (в том числе с удаленной машины)

sftp - безопасная передача файлов, основанная на OpenSSH

rar - (раз)архивирование файлов

gzip - (раз)архивирование файлов

bzip2 - (раз)архивирование файлов

tar - утилита (раз)архивирования файлов

mail [email address] - утилита, обрабатывающая почтовые запросы

dict - вывод определения слова

7. Сценарий выполнения работы (план работы, первоначальный текст программы в черновике [можно на отдельном листе] и тесты либо соображения по тестированию)

1. Прочитать методичку по лабораторной работе, понять, что нужно сделать
2. Самостоятельное изучение материалов по заданной теме
3. Практика на ЭВМ

Пункты 1-7 отчета составляются строго до начала лабораторной работы.

Допущен к выполнению работы. Подпись преподавателя _____

8. Распечатка протокола (подклеить листинг окончательного варианта программы с тестовыми примерами, подписанный преподавателем)

Windows PowerShell

Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! <https://aka.ms/PSWindows>

```
PS C:\important\coding> wsl
vitos@vitos-hp16:/mnt/c/important/coding$ ssh vitos-pop
vitos@vitos-pop's password:
Welcome to Pop!_OS 22.04 LTS (GNU/Linux 5.19.0-76051900-generic x86_64)
```

```
* Homepage: https://pop.system76.com
* Support: https://support.system76.com
```

Last login: Sat Sep 24 10:24:25 2022 from 192.168.1.102

vitos@vitos-pop:~\$ who

```
vitos      :1                2022-09-22 22:46 (:1)
vitos      pts/0            2022-09-22 23:01 (192.168.1.102)
vitos      pts/2            2022-09-24 10:24 (192.168.1.102)
```

vitos@vitos-pop:~\$ sudo ruptime

[sudo] password for vitos:

```
vitos-pop  up      1+11:38,      1 user,    load 0.42, 0.29, 0.35
```

vitos@vitos-pop:~\$ ping vk.com

PING vk.com (93.186.225.194) 56(84) bytes of data.

64 bytes from 93.186.225.194 (93.186.225.194): icmp_seq=1 ttl=58 time=11.1 ms

64 bytes from 93.186.225.194 (93.186.225.194): icmp_seq=2 ttl=58 time=11.1 ms

64 bytes from 93.186.225.194 (93.186.225.194): icmp_seq=3 ttl=58 time=15.9 ms

^C

--- vk.com ping statistics ---

4 packets transmitted, 3 received, 25% packet loss, time 3014ms

rtt min/avg/max/mdev = 11.065/12.709/15.936/2.281 ms

vitos@vitos-pop:~\$ ping 192.168.1.102

PING 192.168.1.102 (192.168.1.102) 56(84) bytes of data.

64 bytes from 192.168.1.102: icmp_seq=1 ttl=128 time=12.6 ms

64 bytes from 192.168.1.102: icmp_seq=2 ttl=128 time=2.77 ms

64 bytes from 192.168.1.102: icmp_seq=3 ttl=128 time=3.50 ms

64 bytes from 192.168.1.102: icmp_seq=4 ttl=128 time=2.27 ms

^C

--- 192.168.1.102 ping statistics ---

4 packets transmitted, 4 received, 0% packet loss, time 3014ms

rtt min/avg/max/mdev = 2.267/5.289/12.621/4.255 ms

vitos@vitos-pop:~\$ exit

logout

Connection to vitos-pop closed.

vitos@vitos-hp16:/mnt/c/important/coding\$ mkdir test

vitos@vitos-hp16:/mnt/c/important/coding\$ ls

bash cpp py rust test web

vitos@vitos-hp16:/mnt/c/important/coding\$ cd test/

vitos@vitos-hp16:/mnt/c/important/coding/test\$ touch a.txt

vitos@vitos-hp16:/mnt/c/important/coding/test\$ nano a.txt

vitos@vitos-hp16:/mnt/c/important/coding/test\$ cat a.txt

hello from another pc

vitos@vitos-hp16:/mnt/c/important/coding/test\$ scp a.txt vitos-pop:/home/vitos/Studying

vitos@vitos-pop's password:

```
a.txt                                100% 22      7.4KB/s   00:00
```

vitos@vitos-hp16:/mnt/c/important/coding/test\$ scp vitos-pop:/home/vitos/Studying/coding/python/projects .

vitos@vitos-pop's password:

scp: /home/vitos/Studying/coding/python/projects: not a regular file

vitos@vitos-hp16:/mnt/c/important/coding/test\$ scp -r vitos-pop:/home/vitos/Studying/coding/python/projects .

ssh: connect to host vitos-pop port 22: Invalid argument

vitos@vitos-hp16:/mnt/c/important/coding/test\$ scp vitos-pop:/home/vitos/Studying/coding/python/projects/Fractal-Builder-on-P

vitos@vitos-pop's password:

```
main.py                             100% 9232    2.6MB/s   00:00
```

vitos@vitos-hp16:/mnt/c/important/coding/test\$ py main.py

Command 'py' not found, but can be installed with:

sudo apt install pythonpy

vitos@vitos-hp16:/mnt/c/important/coding/test\$ python3 main.py

Traceback (most recent call last):

File "/mnt/c/important/coding/test/main.py", line 1, in <module>

import tkinter as tk

ModuleNotFoundError: No module named 'tkinter'

vitos@vitos-hp16:/mnt/c/important/coding/test\$ ls

a.txt main.py

vitos@vitos-hp16:/mnt/c/important/coding/test\$ mkdir files

vitos@vitos-hp16:/mnt/c/important/coding/test\$ mv a.txt files/

vitos@vitos-hp16:/mnt/c/important/coding/test\$ mv main.py files/

vitos@vitos-hp16:/mnt/c/important/coding/test\$ ls

files

vitos@vitos-hp16:/mnt/c/important/coding/test\$ scp -r files vitos-pop:/home/vitos/Studying

vitos@vitos-pop's password:

```

a.txt 100% 22 5.8KB/s 00:00
main.py 100% 9232 1.6MB/s 00:00
vitos@vitos-hp16:/mnt/c/important/coding/test$ rsync -a vitos-pop:/home/vitos/Studying/coding/bash
vitos@vitos-pop's password:
drwxrwxr-x 4,096 2022/09/22 22:48:03 bash
-rwxrwxr-x 255 2022/09/22 22:48:48 bash/guessing_game.sh
vitos@vitos-hp16:/mnt/c/important/coding/test$ rsync -a ../bash vitos-pop:/home/vitos/Studying/coding/bash
vitos@vitos-pop's password:
vitos@vitos-hp16:/mnt/c/important/coding/test$ ssh vitos-pop cd /home/vitos/Studying/coding/bash; ls
vitos@vitos-pop's password:
files
vitos@vitos-hp16:/mnt/c/important/coding/test$ ssh vitos-pop "cd /home/vitos/Studying/coding/bash; ls"
vitos@vitos-pop's password:
bash
guessing_game.sh
vitos@vitos-hp16:/mnt/c/important/coding/test$ ssh vitos-pop "cd /home/vitos/Studying/coding/bash/bash; ls"
vitos@vitos-pop's password:
args.sh
arrays.sh
backed_up_20220903.tar.gz
backup.sh
guessing_game.sh
hello_world.sh
if.sh
info_for_arr.txt
shell_commands.sh
trap.sh
user_input.sh
variables.sh
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls ../bash
args.sh backed_up_20220903.tar.gz guessing_game.sh if.sh shell_commands.sh user_input.sh
arrays.sh backup.sh hello_world.sh info_for_arr.txt trap.sh variables.sh
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
files
vitos@vitos-hp16:/mnt/c/important/coding/test$ cd files
vitos@vitos-hp16:/mnt/c/important/coding/test/files$ cp
a.txt main.py
vitos@vitos-hp16:/mnt/c/important/coding/test/files$ cp a.txt /net/vitos-pop/home/vitos/Studying
cp: cannot create regular file '/net/vitos-pop/home/vitos/Studying': No such file or directory
vitos@vitos-hp16:/mnt/c/important/coding/test/files$ scp a.txt vitos-pop:/home/vitos/Studying
vitos@vitos-pop's password:
a.txt 100% 22 3.7KB/s 00:00
vitos@vitos-hp16:/mnt/c/important/coding/test/files$ sftp vitos-pop
vitos@vitos-pop's password:
Connected to vitos-pop.
sftp> ls
Desktop Documents Downloads Music Pictures Public Studying Templates Videos
sftp> cd Studying/
sftp> ls
a.txt coding files mai
sftp> rm a.txt
Removing /home/vitos/Studying/a.txt
sftp> cd files/
sftp> ls
a.txt main.py
sftp> cd ..
sftp> rm -rf files/
rm: Invalid flag -r
sftp> rm -f files/
rm: Invalid flag -f
sftp> rm files/*
Removing /home/vitos/Studying/files/a.txt
Removing /home/vitos/Studying/files/main.py
sftp> rmdir files/
sftp> ls
coding mai
sftp> pwd
Remote working directory: /home/vitos/Studying
sftp> !pwd
/mnt/c/important/coding/test/files
sftp> !ls
a.txt main.py
sftp> dir
coding mai
sftp> cd coding/
sftp> ls
bash python rust
sftp> cd rust/
rust-minesweeper/ rusty_reversi/ screensaver/
sftp> cd rust/screensaver/
sftp> cd src/
sftp> get main.rs
Fetching /home/vitos/Studying/coding/rust/screensaver/src/main.rs to main.rs
main.rs 100% 2321 237.4KB/s 00:00
sftp> cd ../../..

```

```

sftp> ls
bash      python  rust
sftp> !ls
a.txt    main.py  main.rs
drwxr-xr-x  5 vitos    vitos      4096 Sep 22 22:48 rust
sftp> rm a.txt
Removing /home/vitos/Studying/coding/a.txt
sftp> quit
vitos@vitos-hp16:/mnt/c/important/coding/test/files$ cd ..
vitos@vitos-hp16:/mnt/c/important/coding/test$ pax -w -x tar files > f.tar
Command 'pax' not found, but can be installed with:
sudo apt install pax
vitos@vitos-hp16:/mnt/c/important/coding/test$ sudo apt install pax
[sudo] password for vitos:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  pax
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 86.8 kB of archives.
After this operation, 178 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 pax amd64 1:20201030-1build2 [86.8 kB]
Fetched 86.8 kB in 1s (133 kB/s)
Selecting previously unselected package pax.
(Reading database ... 50513 files and directories currently installed.)
Preparing to unpack .../pax_1%3a20201030-1build2_amd64.deb ...
Unpacking pax (1:20201030-1build2) ...
Setting up pax (1:20201030-1build2) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning processor microcode...
Scanning linux images...

Failed to retrieve available kernel versions.

The processor microcode seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
vitos@vitos-hp16:/mnt/c/important/coding/test$ pax -w -x tar files > f.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
files  f.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ tax -xf f.tar
Command 'tax' not found, did you mean:
  command 'tao' from deb taoqm (1.0-7)
  command 'stax' from deb stax (1.37-2)
  command 'tac' from deb coreutils (8.32-4.1ubuntu1)
  command 'tox' from deb tox (3.21.4-1ubuntu1)
  command 'tx' from deb transifex-client (0.14.2-1)
  command 'pax' from deb pax (1:20201030-1build2)
  command 'rtax' from deb rtax (0.984-8)
  command 'ttx' from deb fonttools (4.29.1-2build1)
  command 'tex' from deb texlive-binaries (2021.20210626.59705-1build1)
  command 'tap' from deb node-tap (12.0.1+ds-4)
  command 'vax' from deb simh (3.8.1-6.1)
  command 'fax' from deb efax (1:0.9a-20)
  command 'tar' from deb tar (1.34+dfsg-1build3)
Try: sudo apt install <deb name>
vitos@vitos-hp16:/mnt/c/important/coding/test$ tar -xf f.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
files  f.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ tar -zcf f.tar.gz files/a.txt files/
a.txt    main.py  main.rs
vitos@vitos-hp16:/mnt/c/important/coding/test$ tar -zcf f.tar.gz files/a.txt files/main.rs
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
files  f.tar  f.tar.gz
vitos@vitos-hp16:/mnt/c/important/coding/test$ sftp axp3.umc8.ru
ssh: Could not resolve hostname axp3.umc8.ru: Name or service not known
Connection closed.
Connection closed
vitos@vitos-hp16:/mnt/c/important/coding/test$ man mail
No manual entry for mail
vitos@vitos-hp16:/mnt/c/important/coding/test$ man mutt
No manual entry for mutt
vitos@vitos-hp16:/mnt/c/important/coding/test$ mail
Command 'mail' not found, but can be installed with:
sudo apt install mailutils
vitos@vitos-hp16:/mnt/c/important/coding/test$ sudo apt install mailutils
Reading package lists... Done

```

```

Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  gsasl-common guile-3.0-libs libgc1 libgsasl7 libidn12 libltdl7 libmailutils8 libmysqlclient21 libntlm0 libpq5 mailutils-com
  mysql-common postfix ssl-cert
After modifying main.cf, be sure to run 'systemctl reload postfix'.

Running newaliases
invoke-rc.d: could not determine current runlevel
invoke-rc.d: could not determine current runlevel
Created symlink /etc/systemd/system/multi-user.target.wants/postfix.service → /lib/systemd/system/postfix.service.
Setting up gsasl-common (1.10.0-5) ...
Setting up guile-3.0-libs:amd64 (3.0.7-1) ...
Setting up libgsasl7:amd64 (1.10.0-5) ...
Setting up libmailutils8:amd64 (1:3.14-1) ...
Setting up mailutils (1:3.14-1) ...
update-alternatives: using /usr/bin/frm.mailutils to provide /usr/bin/frm (frm) in auto mode
update-alternatives: using /usr/bin/from.mailutils to provide /usr/bin/from (from) in auto mode
update-alternatives: using /usr/bin/messages.mailutils to provide /usr/bin/messages (messages) in auto mode
update-alternatives: using /usr/bin/movemail.mailutils to provide /usr/bin/movemail (movemail) in auto mode
update-alternatives: using /usr/bin/readmsg.mailutils to provide /usr/bin/readmsg (readmsg) in auto mode
update-alternatives: using /usr/bin/dotlock.mailutils to provide /usr/bin/dotlock (dotlock) in auto mode
update-alternatives: using /usr/bin/mail.mailutils to provide /usr/bin/mailx (mailx) in auto mode
Processing triggers for rsyslog (8.2112.0-2ubuntu2.2) ...
invoke-rc.d: unknown initscript, /etc/init.d/rsyslog not found.
invoke-rc.d: could not determine current runlevel
Processing triggers for ufw (0.36.1-4build1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
/sbin/ldconfig.real: /usr/lib/wsl/lib/libcuda.so.1 is not a symbolic link

Scanning processes...
Scanning processor microcode...
Scanning linux images...

Failed to retrieve available kernel versions.

The processor microcode seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
vitos@vitos-hp16:/mnt/c/important/coding/test$ man mail
vitos@vitos-hp16:/mnt/c/important/coding/test$ mail vitos-pop hi
Cc: huh?
Subject: bruh
hello from vitos-hp16

vitos@vitos-hp16:/mnt/c/important/coding/test$ sftp vitos-pop
vitos@vitos-pop's password:
Connected to vitos-pop.
sftp> cd Studying/
sftp> mkdir testing
sftp> cd testing/
sftp> pwd
Remote working directory: /home/vitos/Studying/testing
sftp> !ls
sftp> !cat > a.txt
hello, this is a file from vitos-hp16 machine
sftp> !ls
a.txt
sftp> put a.txt
Uploading a.txt to /home/vitos/Studying/testing/a.txt
a.txt                                     100% 46 10.9KB/s 00:00
sftp> quit
vitos@vitos-hp16:/mnt/c/important/coding/test$ ssh vitos-pop
vitos@vitos-pop's password:
Welcome to Pop!_OS 22.04 LTS (GNU/Linux 5.19.0-76051900-generic x86_64)

* Homepage: https://pop.system76.com
* Support: https://support.system76.com

Last login: Thu Sep 29 22:55:13 2022 from 192.168.1.102
vitos@vitos-pop:~$ cd Studying/testing/
vitos@vitos-pop:~/Studying/testing$ cat > b.txt
vitos-pop is here
vitos@vitos-pop:~/Studying/testing$ exit
logout
Connection to vitos-pop closed.
vitos@vitos-hp16:/mnt/c/important/coding/test$ sftp vitos-pop

```

```

vitos@vitos-pop's password:
Connected to vitos-pop.
sftp> cd Studying/testing/
sftp> get b.txt
Fetching /home/vitos/Studying/testing/b.txt to b.txt
b.txt
100% 18 1.0KB/s 00:00
sftp> quit
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt b.txt
vitos@vitos-hp16:/mnt/c/important/coding/test$ ssh vitos-pop
vitos@vitos-pop's password:
Welcome to Pop!_OS 22.04 LTS (GNU/Linux 5.19.0-76051900-generic x86_64)

* Homepage: https://pop.system76.com
* Support: https://support.system76.com

Last login: Sun Oct 9 13:06:13 2022 from 192.168.1.102
vitos@vitos-pop:~$ cd Studying/testing/
vitos@vitos-pop:~/Studying/testing$ mv a.txt b.txt
vitos@vitos-pop:~/Studying/testing$ mv b.txt hi.txt
vitos@vitos-pop:~/Studying/testing$ exit
logout
Connection to vitos-pop closed.
vitos@vitos-hp16:/mnt/c/important/coding/test$ scp vitos-pop:Studying/testing/hi.txt c.txt
vitos@vitos-pop's password:
hi.txt
100% 46 15.4KB/s 00:00
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt b.txt c.txt
vitos@vitos-hp16:/mnt/c/important/coding/test$ tar -cf zipped.tar 'pwd'
tar: Removing leading '/' from member names
tar: /mnt/c/important/coding/test/zipped.tar: file is the archive; not dumped
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt b.txt c.txt zipped.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ gzip -9 -c zipped.tar > gzip.tgz
vitos@vitos-hp16:/mnt/c/important/coding/test$ gzip -d -c gzip.tgz > ungzip.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ tar -xf ungzip.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt b.txt c.txt gzip.tgz mnt ungzip.tar zipped.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ rm -rf mnt ungzip.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ man bzip2
No manual entry for bzip2
vitos@vitos-hp16:/mnt/c/important/coding/test$ sudo apt install bzip2
[sudo] password for vitos:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  bzip2-doc
The following NEW packages will be installed:
  bzip2
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 34.8 kB of archives.
After this operation, 117 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 bzip2 amd64 1.0.8-5build1 [34.8 kB]
Fetched 34.8 kB in 0s (117 kB/s)
Selecting previously unselected package bzip2.
(Reading database ... 51677 files and directories currently installed.)
Preparing to unpack .../bzip2_1.0.8-5build1_amd64.deb ...
Unpacking bzip2 (1.0.8-5build1) ...
Setting up bzip2 (1.0.8-5build1) ...
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning processor microcode...
Scanning linux images...

Failed to retrieve available kernel versions.

The processor microcode seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
vitos@vitos-hp16:/mnt/c/important/coding/test$ man bzip2
vitos@vitos-hp16:/mnt/c/important/coding/test$ bzip2 -z a.txt b.txt
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt.bz2 b.txt.bz2 c.txt gzip.tgz zipped.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ bzip2 -d a.txt.bz2
vitos@vitos-hp16:/mnt/c/important/coding/test$ bzip2 -d b.txt.bz2
vitos@vitos-hp16:/mnt/c/important/coding/test$ ls
a.txt b.txt c.txt gzip.tgz zipped.tar
vitos@vitos-hp16:/mnt/c/important/coding/test$ dict Bebra

```

No definitions found for "Bebra", perhaps you mean:
gcide: Zebra
wn: zebra beira berra
easton: Bera
hitchcock: Bera Beera
vitos@vitos-hp16:/mnt/c/important/coding/test\$ dict zebra
3 definitions found

From The Collaborative International Dictionary of English v.0.48 [gcide]:

Zebra \Ze"bra\, n. [Pg. zebra; cf. Sp. cebra; probably from a native African name.] (Zool.)
Any member of three species of African wild horses remarkable for having the body white or yellowish white, and conspicuously marked with dark brown or brackish bands.
[1913 Webster]

Note: The true or mountain zebra ({Equus zebra} syn. {Asinus zebra}) is nearly white, and the bands which cover the body and legs are glossy black. Its tail has a tuft of black hair at the tip. It inhabits the mountains of Central and Southern Africa, and is noted for its wariness and wildness, as well as for its swiftness. The second species ({Equus Burchellii} syn. {Asinus Burchellii} or {Equus quagga}), known as {Burchell's zebra}, {plains zebra}, and {dauw}, is the most abundant, inhabiting the grassy plains of tropical and southern Africa, and differing from the preceding in not having dark bands on the legs, while those on the body are more irregular. It has a long tail, covered with long white flowing hair. Grevy's zebra ({Equus grevyi}) is distinct from the others in being placed in the subgenus Dolichohippus, whereas the plains and mountain zebras are placed in the subgenus Hippotigris. More on zebras can be found at:
<http://www.imh.org/imh/bw/zebra.html>
[1913 Webster +PJC]

{Zebra caterpillar}, the larva of an American noctuid moth ({Mamestra picta}). It is light yellow, with a broad black stripe on the back and one on each side; the lateral stripes are crossed with white lines. It feeds on cabbages, beets, clover, and other cultivated plants.

{Zebra opossum}, the zebra wolf. See under {Wolf}.

{Zebra parrakeet}, an Australian grass parrakeet, often kept as a cage bird. Its upper parts are mostly pale greenish yellow, transversely barred with brownish black crescents; the under parts, rump, and upper tail coverts, are bright green; two central tail feathers and the cheek patches are blue. Called also {canary parrot}, {scallop parrot}, {shell parrot}, and {undulated parrot}.

{Zebra poison} (Bot.), a poisonous tree ({Euphorbia arborea}) of the Spurge family, found in South Africa. Its milky juice is so poisonous that zebras have been killed by drinking water in which its branches had been placed, and it is also used as an arrow poison. --J. Smith (Dict. Econ. Plants).

{Zebra shark}. Same as {Tiger shark}, under {Tiger}.

{Zebra spider}, a hunting spider.

{Zebra swallowtail}, a very large North American swallow-tailed butterfly ({Iphiclidides ajax}), in which the wings are yellow, barred with black; -- called also {ajax}.

{Zebra wolf}. See under {Wolf}.
[1913 Webster]

From WordNet (r) 3.0 (2006) [wn]:

zebra
n 1: any of several fleet black-and-white striped African equines

From The Free On-line Dictionary of Computing (30 December 2018) [foldoc]:

ZEBRA

A data management package in the {CERN Program Library}.

vitos@vitos-hp16:/mnt/c/important/coding/test\$ dict giraffe | iconv -f utf-8 -t koi8-r
4 definitions found

From The Collaborative International Dictionary of English v.0.48 [gcide]:

giraffe \gi*raffe\ (j[i~]*r[a~]f"; 277), n. [F. girafe, Sp. girafa, from Ar. zur[=a]fa, zar[=a]fa.] (Zool.)
An African ruminant ({Giraffa camelopardalis} formerly {Camelopardalis giraffa}) related to the deers and antelopes, but placed in a family ({Giraffidae}) by itself; the camelopard. It is the tallest of quadruped animals, being sometimes twenty feet from the hoofs to the top of the head. Its neck is very long, and its fore legs are much longer than its hind legs. There are three types, having different patterns of spots on the pelt and different territories: the {Reticulated Giraffe}, the {Masai Giraffe}, and the {Uganda Giraffe}. Intermediate crosses are also observed.
[1913 Webster +PJC]

From The Collaborative International Dictionary of English v.0.48 [gcide]:

Camelopard \Ca*mel"o*pard\ (k[.a]*m[e~]l[-o]*p[aum]rd or k[a~]m[e~]l[-o]*p[aum]rd; 277), n. [LL. camelopardus, L. camelopardalus, camelopardalis, fr. Gr. kamhlopa'rdalis; ka'mhlos a camel + pa'rdalis pard, leopard: cf. F. cam[e]lopard. The camelopard has a neck and head like a camel, and is spotted like a pard. See {Camel}, and {Pard}.]
(Zool.)
An African ruminant; the {giraffe}. See {Giraffe}.
[1913 Webster]

From WordNet (r) 3.0 (2006) [wn]:

giraffe
n 1: tallest living quadruped; having a spotted coat and small horns and very long neck and legs; of savannahs of tropical Africa [syn: {giraffe}, {camelopard}, {Giraffa camelopardalis}]

From Moby Thesaurus II by Grady Ward, 1.0 [moby-thesaurus]:

33 Moby Thesaurus words for "giraffe":
Cape elk, Virginia deer, antelope, buck, camel, camelopard, caribou, deer, deerlet, doe, dromedary, eland, elk, fallow deer, fawn, gazelle, gnu, hart, hartebeest, hind, kaama, moose, mule deer, musk deer, okapi, red deer, reindeer, roe, roe deer, roebuck, springbok, stag, wildebeest

vitos@vitos-hp16:/mnt/c/important/coding/test\$ exit

9. Дневник отладки должен содержать дату и время сеансов отладки и основные события (ошибки в сценарии и программе, нестандартные ситуации) и краткие комментарии к ним. В дневнике отладки приводятся сведения об использовании ЭВМ, существенном участии преподавателя и других лиц в написании и отладке программы.

№	Лаб. или дом.	Дата	Время	Событие	Действие по исправлению	Примечание

10. Замечания автора по существу работы:

11. Выводы: Я научился пользоваться командами, связанными с коммуникацией различных устройств в локальной сети. Научился пользоваться удаленной машиной при помощи ssh и sftp. Научился пользоваться программами архивирования и разархивирования

Недочёты при выполнении задания могут быть устранены следующим образом:

Подпись студента