

РОССИЙСКИЙ УНИВЕРСИТЕТ ДРУЖБЫ НАРОДОВ
Факультет физико-математических и естественных наук
Кафедра прикладной информатики и теории вероятностей

ОТЧЕТ
по лабораторной работе № 6
дисциплина: Операционные системы

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Группа: НПИ-01

МОСКВА

2018 г

Цель работы:

Ознакомиться с инструментами поиска файлов и фильтрации текстовых данных. Приобрести практические навыки: по управлению процессами (и заданиями), по проверке использования диска и обслуживанию файловых систем.

Ход работы:

- **Осуществили вход в систему под моим именем пользователя.**
- **Записали в файл file.txt названия файлов, содержащихся в каталоге /etc.**

Activities Terminal May 7 11:59

file.txt

Open Save

234 sy
235 sy
236 to
237 te
238 th
239 tm
240 tp
241 Tr
242 tr
243 ud
244 ud
245 un
246 up
247 UP
248 ur
249 us
250 vc
251 vi
252 vm
253 vp
254 vu
255 wg
256 wi
257 wp
258 X1
259 xa
260 xd
261 xm
262 yu
263 zf

eazewde@fedora:~ — gedit file.txt

eazewde@fedora:~ x eazewde@fedora:~ — gedit file.txt x

```
[eazewde@fedora ~]$ cd
[eazewde@fedora ~]$ ls /etc > file.txt
[eazewde@fedora ~]$ ls
abcl      Desktop  feathers  monthly.00  Pictures  ski.places  xyz
april     Documents file.txt   monthlyyy   play      sunday      xyz1
australia Downloads gamesclear morefun     Public    Templates  zedo
cp        eyob     may       Music       s         Videos
david    eyobaye  monthly   my_os      saturday  weekly
[eazewde@fedora ~]$ gedit file.txt
```

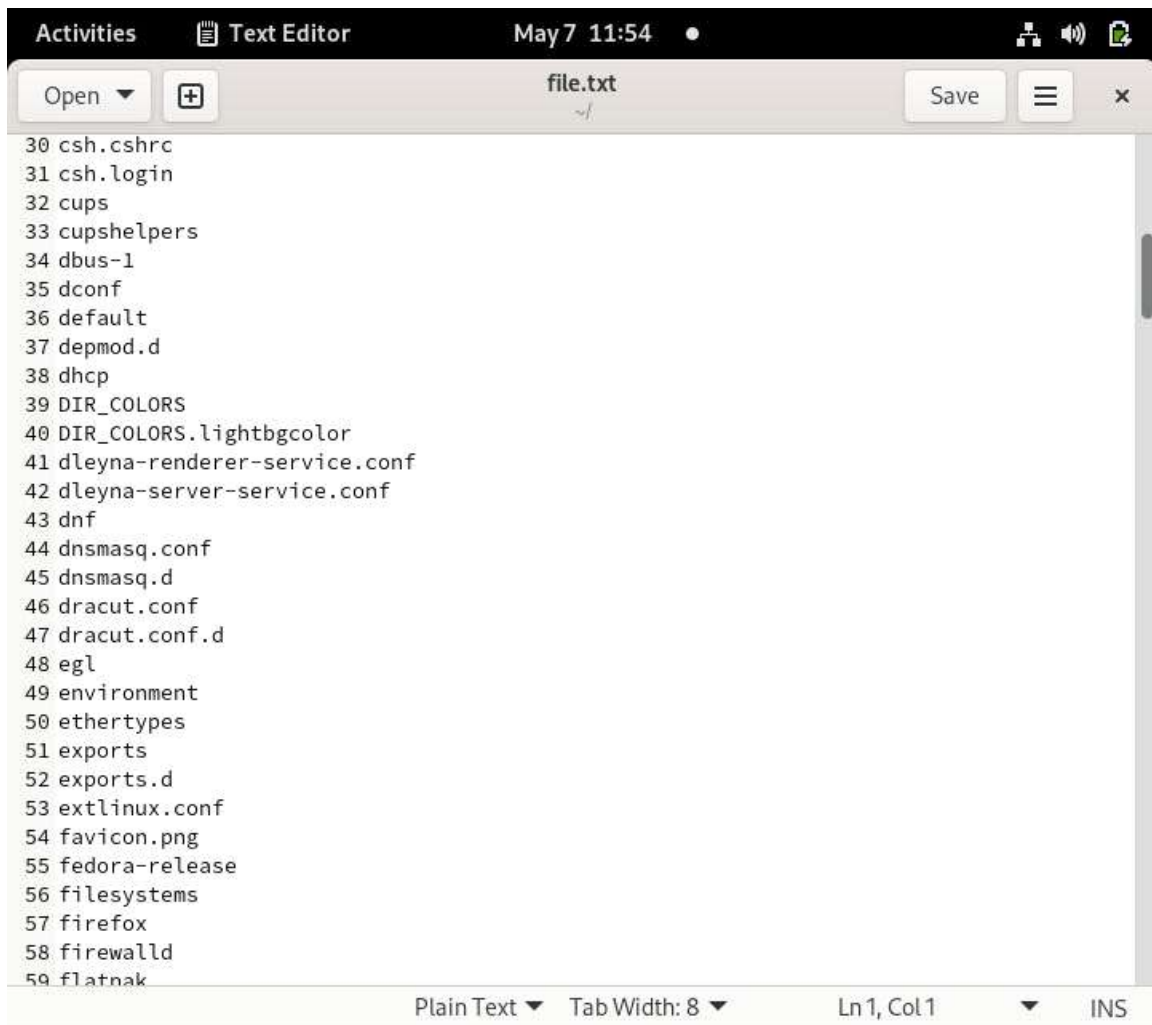
Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Text Editor May 6 11:55 • [Network] [Sound] [File Manager]

Open ▾ + *file.txt Save ≡ ×

```
1 |abrt
2 adjtime
3 aliases
4 alsa
5 alternatives
6 anaconda
7 anthy-unicode.conf
8 appstream.conf
9 asound.conf
10 audit
11 authselect
12 avahi
13 bash_completion.d
14 bashrc
15 bindresvport.blacklist
16 binfmt.d
17 bluetooth
18 brlapi.key
19 brltty
20 brltty.conf
21 ceph
22 chkconfig.d
23 chromium
24 chrony.conf
25 chrony.keys
26 cifs-utils
27 containers
28 crypto-policies
29 crypttab
```

Plain Text ▾ Tab Width: 8 ▾ Ln 1, Col 1 ▾ INS

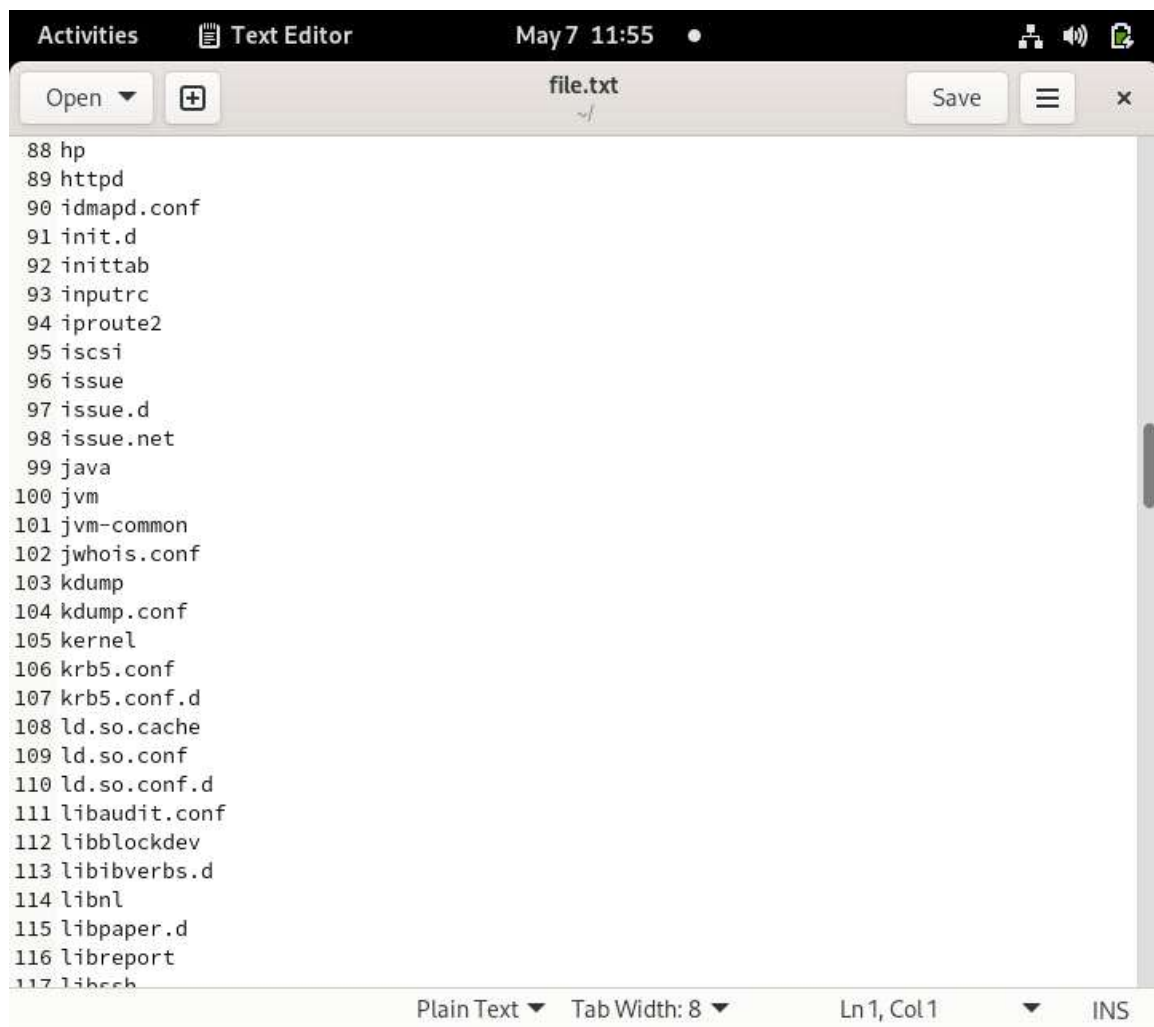


The image shows a screenshot of a text editor window titled "Text Editor" with the date and time "May 7 11:54". The window contains a list of system files and directories, numbered 30 through 59. The files listed are: csh.cshrc, csh.login, cups, cupshelpers, dbus-1, dconf, default, depmod.d, dhcp, DIR_COLORS, DIR_COLORS.lightbgcolor, dley-na-renderer-service.conf, dley-na-server-service.conf, dnf, dnsmasq.conf, dnsmasq.d, dracut.conf, dracut.conf.d, egl, environment, ethertypes, exports, exports.d, extlinux.conf, favicon.png, fedora-release, filesystems, firefox, firewalld, and flatpak. The editor's status bar at the bottom indicates "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
30 csh.cshrc
31 csh.login
32 cups
33 cupshelpers
34 dbus-1
35 dconf
36 default
37 depmod.d
38 dhcp
39 DIR_COLORS
40 DIR_COLORS.lightbgcolor
41 dley-na-renderer-service.conf
42 dley-na-server-service.conf
43 dnf
44 dnsmasq.conf
45 dnsmasq.d
46 dracut.conf
47 dracut.conf.d
48 egl
49 environment
50 ethertypes
51 exports
52 exports.d
53 extlinux.conf
54 favicon.png
55 fedora-release
56 filesystems
57 firefox
58 firewalld
59 flatpak
```

The screenshot shows a Linux desktop environment with a text editor window titled "Text Editor" and "file.txt". The window has a top bar with "Activities", "Text Editor", and the date/time "May 7 11:55". Below the top bar is a toolbar with "Open", a "+" icon, "Save", a menu icon, and a close icon. The main text area contains a list of system files and directories, each preceded by a line number from 59 to 87. The list includes: flatpak, flexiblasrc, flexiblasrc.d, fonts, fprintd.conf, fstab, fuse.conf, fwupd, gcrypt, gdbinit, gdbinit.d, gdm, geoclue, glvnd, gnupg, GREP_COLORS, groff, group, group-, grub2.cfg, grub2-efi.cfg, grub.d, gshadow, gshadow-, gss, gssproxy, host.conf, hostname, and hosts. The bottom status bar shows "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
59 flatpak
60 flexiblasrc
61 flexiblasrc.d
62 fonts
63 fprintd.conf
64 fstab
65 fuse.conf
66 fwupd
67 gcrypt
68 gdbinit
69 gdbinit.d
70 gdm
71 geoclue
72 glvnd
73 gnupg
74 GREP_COLORS
75 groff
76 group
77 group-
78 grub2.cfg
79 grub2-efi.cfg
80 grub.d
81 gshadow
82 gshadow-
83 gss
84 gssproxy
85 host.conf
86 hostname
87 hosts
```



The image shows a screenshot of a Linux desktop environment. At the top, there is a dark grey panel with the text "Activities" on the left, "Text Editor" in the center, and the date and time "May 7 11:55" on the right. Below this panel is a window titled "file.txt" with a "Save" button and a close button. The main area of the window contains a list of system files and directories, each preceded by a line number from 88 to 117. The list includes: hp, httpd, idmapd.conf, init.d, inittab, inputrc, iproute2, iscsi, issue, issue.d, issue.net, java, jvm, jvm-common, jwhois.conf, kdump, kdump.conf, kernel, krb5.conf, krb5.conf.d, ld.so.cache, ld.so.conf, ld.so.conf.d, libaudit.conf, libblockdev, libibverbs.d, libnl, libpaper.d, libreport, and libscb. At the bottom of the window, there is a status bar with the text "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
88 hp
89 httpd
90 idmapd.conf
91 init.d
92 inittab
93 inputrc
94 iproute2
95 iscsi
96 issue
97 issue.d
98 issue.net
99 java
100 jvm
101 jvm-common
102 jwhois.conf
103 kdump
104 kdump.conf
105 kernel
106 krb5.conf
107 krb5.conf.d
108 ld.so.cache
109 ld.so.conf
110 ld.so.conf.d
111 libaudit.conf
112 libblockdev
113 libibverbs.d
114 libnl
115 libpaper.d
116 libreport
117 libscb
```

The screenshot shows a text editor window titled "Text Editor" with the filename "file.txt". The window contains a list of system files and directories, numbered 117 to 146. The files listed are: libssh, libuser.conf, libvirt, locale.conf, localtime, login.defs, logrotate.conf, logrotate.d, lvm, machine-id, magic, mailcap, makedumpfile.conf.sample, man_db.conf, mcelog, mdevctl.d, mime.types, mke2fs.conf, modprobe.d, modules-load.d, motd, motd.d, mtab, mtools.conf, my.cnf, my.cnf.d, nanorc, ndctl, netconfig, and NetworkManager. The status bar at the bottom indicates the editor is in "Plain Text" mode with a "Tab Width" of 8, and the cursor is at "Ln 1, Col 1". The text "INS" is also visible in the status bar.

```
117 libssh
118 libuser.conf
119 libvirt
120 locale.conf
121 localtime
122 login.defs
123 logrotate.conf
124 logrotate.d
125 lvm
126 machine-id
127 magic
128 mailcap
129 makedumpfile.conf.sample
130 man_db.conf
131 mcelog
132 mdevctl.d
133 mime.types
134 mke2fs.conf
135 modprobe.d
136 modules-load.d
137 motd
138 motd.d
139 mtab
140 mtools.conf
141 my.cnf
142 my.cnf.d
143 nanorc
144 ndctl
145 netconfig
146 NetworkManager
```

Plain Text ▼ Tab Width: 8 ▼ Ln 1, Col 1 ▼ INS

Activities Text Editor May 7 11:56

file.txt

Open Save

```
147 networks
148 nfs.conf
149 nfsmount.conf
150 nftables
151 nsswitch.conf
152 nsswitch.conf.bak
153 openldap
154 opensc.conf
155 opensc-x86_64.conf
156 openvpn
157 opt
158 os-release
159 ostree
160 PackageKit
161 pam.d
162 papersize
163 passwd
164 passwd-
165 passwdqc.conf
166 pinforc
167 pkcs11
168 pkgconfig
169 pki
170 plymouth
171 pm
172 polkit-1
173 popt.d
174 ppp
175 printcap
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Text Editor May 7 11:56

file.txt

Open Save

```
176 profile
177 profile.d
178 protocols
179 pulse
180 qemu
181 qemu-ga
182 radvd.conf
183 rc0.d
184 rc1.d
185 rc2.d
186 rc3.d
187 rc4.d
188 rc5.d
189 rc6.d
190 rc.d
191 reader.conf.d
192 redhat-release
193 request-key.conf
194 request-key.d
195 resolv.conf
196 rpc
197 rpm
198 rsyncd.conf
199 rwtab.d
200 rygel.conf
201 samba
202 sane.d
203 sasl2
204 security
205 selinux
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Terminal May 7 11:59

Open file.txt Save

234 sy
235 sy
236 to
237 te
238 th
239 tm
240 tp
241 Tr
242 tr
243 ud
244 ud
245 un
246 up
247 UP
248 ur
249 us
250 vc
251 vi
252 vm
253 vp
254 vu
255 wg
256 wi
257 wp
258 X1
259 xa
260 xd
261 xm
262 yu
263 zf

eazewde@fedora:~ — gedit file.txt

eazewde@fedora:~ x eazewde@fedora:~ — gedit file.txt x

```
[eazewde@fedora ~]$ cd
[eazewde@fedora ~]$ ls /etc > file.txt
[eazewde@fedora ~]$ ls
abcl      Desktop  feathers  monthly.00  Pictures  ski.places  xyz
april     Documents file.txt    monthlyy   play      sunday     xyz1
australia Downloads gamesclear morefun    Public    Templates  zedo
cp        eyob     may       Music      s         Videos
david     eyobaye monthly  my_os      saturday  weekly
[eazewde@fedora ~]$ gedit file.txt
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

The screenshot shows a Linux desktop environment with a text editor window titled "Text Editor" and "file.txt". The window has a top bar with "Activities", "Text Editor", and the date/time "May 7 11:56". Below the top bar is a toolbar with "Open", a "+" icon, "Save", a menu icon, and a close "x" icon. The main text area contains a list of system files and directories, each preceded by a line number from 147 to 175. The list includes: networks, nfs.conf, nfsmount.conf, nftables, nsswitch.conf, nsswitch.conf.bak, openldap, opensc.conf, opensc-x86_64.conf, openvpn, opt, os-release, ostree, PackageKit, pam.d, papersize, passwd, passwd-, passwdqc.conf, pinforc, pkcs11, pkgconfig, pki, plymouth, pm, polkit-1, popt.d, ppp, and printcap. The bottom status bar shows "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
147 networks
148 nfs.conf
149 nfsmount.conf
150 nftables
151 nsswitch.conf
152 nsswitch.conf.bak
153 openldap
154 opensc.conf
155 opensc-x86_64.conf
156 openvpn
157 opt
158 os-release
159 ostree
160 PackageKit
161 pam.d
162 papersize
163 passwd
164 passwd-
165 passwdqc.conf
166 pinforc
167 pkcs11
168 pkgconfig
169 pki
170 plymouth
171 pm
172 polkit-1
173 popt.d
174 ppp
175 printcap
```

Activities Text Editor May 7 11:56

file.txt

Open Save

```
176 profile
177 profile.d
178 protocols
179 pulse
180 qemu
181 qemu-ga
182 radvd.conf
183 rc0.d
184 rc1.d
185 rc2.d
186 rc3.d
187 rc4.d
188 rc5.d
189 rc6.d
190 rc.d
191 reader.conf.d
192 redhat-release
193 request-key.conf
194 request-key.d
195 resolv.conf
196 rpc
197 rpm
198 rsyncd.conf
199 rwtab.d
200 rygel.conf
201 samba
202 sane.d
203 sasl2
204 security
205 selinux
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

The screenshot shows a Linux desktop environment with a text editor window open. The window title is "Text Editor" and the date/time is "May 6 11:55". The editor is displaying a list of system files, each preceded by a line number from 1 to 29. The files listed are: abrt, adjtime, aliases, alsa, alternatives, anaconda, anthy-unicode.conf, appstream.conf, asound.conf, audit, authselect, avahi, bash_completion.d, bashrc, bindresvport.blacklist, binfmt.d, bluetooth, brlapi.key, brltty, brltty.conf, ceph, chkconfig.d, chromium, chrony.conf, chrony.keys, cifs-utils, containers, crypto-policies, and crypttab. The editor's status bar at the bottom indicates "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

```
1 abrt
2 adjtime
3 aliases
4 alsa
5 alternatives
6 anaconda
7 anthy-unicode.conf
8 appstream.conf
9 asound.conf
10 audit
11 authselect
12 avahi
13 bash_completion.d
14 bashrc
15 bindresvport.blacklist
16 binfmt.d
17 bluetooth
18 brlapi.key
19 brltty
20 brltty.conf
21 ceph
22 chkconfig.d
23 chromium
24 chrony.conf
25 chrony.keys
26 cifs-utils
27 containers
28 crypto-policies
29 crypttab
```

The screenshot shows a Linux desktop environment with a text editor window open. The window title is "file.txt" and it contains a list of system files and directories. The list is as follows:

```
205 selinux
206 services
207 sestatus.conf
208 sgml
209 shadow
210 shadow-
211 shells
212 skel
213 sos
214 speech-dispatcher
215 ssh
216 ssl
217 sssd
218 statetab.d
219 subgid
220 subgid-
221 subuid
222 subuid-
223 sudo.conf
224 sudoers
225 sudoers.d
226 swid
227 swtpm-localca.conf
228 swtpm-localca.options
229 swtpm_setup.conf
230 sysconfig
231 sysctl.conf
232 sysctl.d
233 systemd
```

The editor interface includes a top bar with "Activities", "Text Editor", and the date/time "May 7 11:56". Below this is a toolbar with "Open", a "+" icon, "file.txt", "Save", a menu icon, and a close "x" icon. The bottom status bar shows "Plain Text", "Tab Width: 8", "Ln 1, Col 1", and "INS".

Activities Terminal May 7 12:00

file.txt

Open Save

```
234 sy
235 sy
236 to
237 te
238 th
239 tm
240 tp [eazewde@fedora ~]$ grep conf file.txt
241 Tr anthy-unicode.conf
242 tr appstream.conf
243 ud asound.conf
244 ud brltty.conf
245 un chkconfig.d
246 up chrony.conf
247 UP dconf
248 ur dleyna-renderer-service.conf
249 us dleyna-server-service.conf
250 vc dnsmasq.conf
251 vi dracut.conf
252 vm dracut.conf.d
253 vp extlinux.conf
254 vu fprintd.conf
255 wg fuse.conf
256 wi host.conf
257 wp idmapd.conf
258 X1 jwhois.conf
259 xa kdump.conf
260 xd krb5.conf
261 xm krb5.conf.d
262 yu ld.so.conf
263 zf ld.so.conf.d
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Terminal May 7 12:00

Open file.txt Save

eazewde@fedora:~

234 sy
235 sy
236 to
237 te
238 th
239 tm
240 tp ld.so.conf.d
241 Tr libaudit.conf
242 tr libuser.conf
243 ud locale.conf
244 ud logrotate.conf
245 un makedumpfile.conf.sample
246 up man_db.conf
247 UP mke2fs.conf
248 ur mtools.conf
249 us netconfig
250 vc nfs.conf
251 vi nfsmount.conf
252 vm nsswitch.conf
253 vp nsswitch.conf.bak
254 vu opensc.conf
255 wg opensc-x86_64.conf
256 wi passwdqc.conf
257 wp pkgconfig
258 X1 radvd.conf
259 xa reader.conf.d
260 xd request-key.conf
261 xm resolv.conf
262 yu rsyncd.conf
263 zf rvgel.conf

Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Terminal May 7 12:01

Open Text Editor "conf.txt (~/) - gedit" is ready

```
1 ant
2 app
3 aso
4 brl [eazewde@fedora ~]$ grep .conf file.txt >> conf.txt
5 chk [eazewde@fedora ~]$ gedit conf.txt
6 chr [eazewde@fedora ~]$
7 dco
8 dle
9 dle
10 dns
11 dra
12 dra
13 ext
14 fpr
15 fus
16 hos
17 idm
18 jwh
19 kdu
20 krb
21 krb
22 ld.
23 ld.
24 lib
25 lib
26 loc
27 log
28 make-dump621e-conf-example
```

Loading file "/home/eazewde/co... Plain Text Tab Width: 8 Ln 1, Col 1 INS

Activities Text Editor May 7 12:09

Open + conf.txt Save

file.txt x conf.txt x

The file "/home/eazewde/conf.txt" changed on disk. Reload x

```
1 anthy-unicode.conf
2 appstream.conf
3 asound.conf
4 brltty.conf
5 chkconfig.d
6 chrony.conf
7 dconf
8 dley-na-renderer-service.conf
9 dley-na-server-service.conf
10 dnsmasq.conf
11 dracut.conf
12 dracut.conf.d
13 extlinux.conf
14 fprintd.conf
15 fuse.conf
16 host.conf
17 idmapd.conf
18 jwhois.conf
19 kdump.conf
20 krb5.conf
21 krb5.conf.d
22 ld.so.conf
23 ld.so.conf.d
24 libaudit.conf
25 libuser.conf
```

Plain Text Tab Width: 8 Ln 5, Col 12 INS

Activities Text Editor May 7 12:09

Open conf.txt Save

file.txt conf.txt

The file "/home/eazewde/conf.txt" changed on disk. Reload

```
35 nsswitch.conf
36 nsswitch.conf.bak
37 opensc.conf
38 opensc-x86_64.conf
39 passwdqc.conf
40 pkgconfig
41 radvd.conf
42 reader.conf.d
43 request-key.conf
44 resolv.conf
45 rsyncd.conf
46 rygel.conf
47 sestatus.conf
48 sudo.conf
49 swtpm-localca.conf
50 swtpm_setup.conf
51 sysconfig
52 sysctl.conf
53 tcstd.conf
54 Trolltech.conf
55 updatedb.conf
56 uresourced.conf
57 usb_modeswitch.conf
58 vconsole.conf
59 xattr.conf
```

Plain Text Tab Width: 8 Ln 5, Col 12 INS

```
[eazewde@fedora ~]$ gedit &
[1] 2687
[eazewde@fedora ~]$ ps axu | grep gedit
eazewde    2476  0.8  1.6 786172 68004 pts/0    Sl+  13:23   0:03 gedit conf.tx
t
eazewde    2705  0.0  0.0 221788  2384 pts/4    S+   13:31   0:00 grep --color=
auto gedit
[1]+  Done                  gedit
[eazewde@fedora ~]$
```

- Запустили из консоли в фоновом режиме редактор gedit. Определили идентификатор процесса gedit, используя команду ps, конвейер и фильтр grep. Команда: ps axu | grep gedit. Определить этот идентификатор можно и более простым способом: он высвечивается сразу после запуска процесса в фоновом режиме. Также можно использовать команду jobs, которая выведет список запущенных в данный момент задач

The screenshot shows a Fedora Linux desktop environment. In the background, there is a text editor window titled 'Untitled Document 1' with a menu bar containing 'Open', 'Save', and a hamburger menu icon. The foreground window is a terminal titled 'eazewde@fedora:~ — man kill'. The terminal displays the man page for the 'kill' command, which includes sections for NAME, SYNOPSIS, and DESCRIPTION. The terminal has a dark theme and a tab bar at the top with several tabs, the last of which is active and highlighted. The status bar at the bottom of the terminal shows 'Plain Text', 'Tab Width: 8', 'Ln 1, Col 1', and 'INS'.

```
KILL(1)                                User Commands                                KILL(1)

NAME
    kill - terminate a process

SYNOPSIS
    kill [-signal|-s signal|-p] [-q value] [-a] [--timeout milliseconds
    signal] [--] pid/name...

    kill -l [number] | -L

DESCRIPTION
    The command kill sends the specified signal to the specified processes
    or process groups.

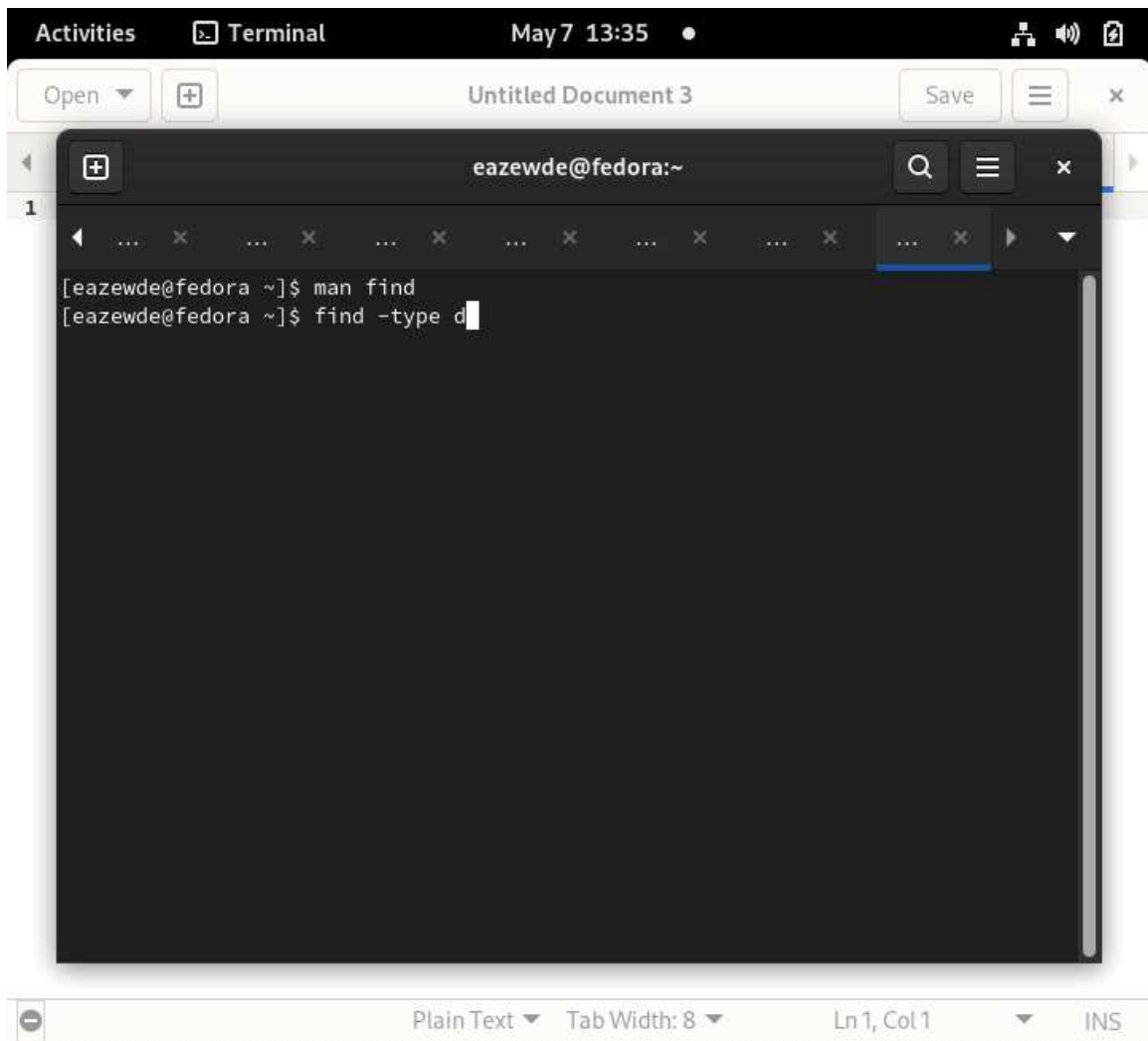
    If no signal is specified, the TERM signal is sent. The default action
    for this signal is to terminate the process. This signal should be used
    in preference to the KILL signal (number 9), since a process may
    install a handler for the TERM signal in order to perform clean-up
    steps before terminating in an orderly fashion. If a process does not
    terminate after a TERM signal has been sent, then the KILL signal may
    be used; be aware that the latter signal cannot be caught, and so does
    not give the target process the opportunity to perform any clean-up

Manual page kill(1) line 1 (press h for help or q to quit)
```

```
[eazewde@fedora ~]$ gedit &
[1] 2803
[eazewde@fedora ~]$ ps axu | grep gedit
eazewde      2476  0.6  1.8 791256 72972 pts/0    Sl+  13:23   0:03  gedit conf.tx
t
eazewde      2812  0.0  0.0 221788  2188 pts/6    S+   13:32   0:00  grep --color=
auto  gedit
[1]+  Done                  gedit
[eazewde@fedora ~]$ man kill
[eazewde@fedora ~]$ gedit
[eazewde@fedora ~]$
```

Вывод `du` настолько огромный, что его начало консоль не показала.

- Воспользовавшись справкой команды `find`, вывели имена всех директорий, имеющихя в вашем домашнем каталоге.



Activities Terminal May 7 13:36

Open + Untitled Document 3 Save

1 eazewde@fedora:~

```
./mozilla
./mozilla/extensions
./mozilla/extensions/{ec8030f7-c20a-464f-9b0e-13a3a9e97384}
./mozilla/plugins
./mozilla/firefox
./mozilla/firefox/Crash Reports
./mozilla/firefox/Crash Reports/events
./mozilla/firefox/Pending Pings
./mozilla/firefox/e2nlg477.default-release
./mozilla/firefox/e2nlg477.default-release/minidumps
./mozilla/firefox/e2nlg477.default-release/crashes
./mozilla/firefox/e2nlg477.default-release/crashes/events
./mozilla/firefox/e2nlg477.default-release/storage
./mozilla/firefox/e2nlg477.default-release/storage/permanent
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome/idb
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome/idb/3870112
724rsegmnoittet-es.files
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome/idb/3870112
724rsegmnoittet-es.files/journals
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome/idb/3561288
849sdhlie.files
./mozilla/firefox/e2nlg477.default-release/storage/permanent/chrome/idb/1451318
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

```
Activities Terminal May 7 13:36
Untitled Document 3
eazewde@fedora:~
./.git/refs
./.git/refs/heads
./.git/refs/tags
./.git/objects
./.git/objects/pack
./.git/objects/info
./morefun
./david
./s
./eyob
./weekly
./monthlyy
./monthly.00
./monthly.00/monthly
./monthly
./ski.places
./ski.places/equipment
./ski.places/equipment/equiplist
./ski.places/plans
./gamesclear
./play
./find
./logfile
[eazewde@fedora ~]$
```

Количество директорий также огромное и консоль не показывает начало списка.

Вывод:

В ходе работы мы ознакомились с инструментами поиска файлов и фильтрации текстовых данных, а также приобрели практические навыки как по управлению процессами и заданиями, так и по проверке использования диска и обслуживанию файловых систем.

