```
198097@client05:~$ cat > head.txt
****************************
* Лабораторная работа №2   *
* Основные утилиты ОС UNIX *
*                          *
* выполнил студент группы  *
*           104            *
* Черница Артём Александрович *
****************************
198097@client05:~$ ды
^C
198097@client05:~$ ^C
198097@client05:~$ ls
Desktop    Downloads  Music     Public  Templates
Documents  head.txt   Pictures  scr.sh  Videos
198097@client05:~$ vi head.txt
198097@client05:~$ clear

198097@client05:~$ cat head.txt
******************************
*    Лабораторная работа №2     *
*    Основные утилиты ОС UNIX   *
*                              *
*   выполнил студент группы     *
*             104              *
* Черница Артём Александрович  *
******************************
198097@client05:~$ ls
Desktop    Downloads  Music     Public  Templates
Documents  head.txt   Pictures  scr.sh  Videos
198097@client05:~$ ls -l
total 40
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Desktop
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Documents
drwxr-xr-x 3 198097 198097 4096 сен  3 17:15 Downloads
-rw-rw-r-- 1 198097 198097  339 окт  1 15:52 head.txt
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Music
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Pictures
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Public
-rwxrwxr-x 1 198097 198097   12 сен  3 17:48 scr.sh
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Templates
drwxr-xr-x 2 198097 198097 4096 сен  3 17:06 Videos
198097@client05:~$ ls -a
.               Documents        .pam_environment  .viminfo
..              Downloads        Pictures          .Xauthority
.bash_history   .emacs.d         .profile          .Xdefaults
.bash_logout    .gnupg           Public            .xscreensaver
.bashrc         .gnuplot_history .remmina          .xsession-errors
.cache          head.txt         scr.sh            .xsession-
errors.old
.config         .local           Templates
Desktop         .mozilla         .thumbnails
.dmrc           Music            Videos
198097@client05:~$ ls -F
```

```
Desktop/    Downloads/  Music/     Public/    Templates/
Documents/  head.txt    Pictures/  scr.sh*    Videos/
198097@client05:~$ ls -g
total 40
drwxr-xr-x 2 198097 4096 сен  3 17:06 Desktop
drwxr-xr-x 2 198097 4096 сен  3 17:06 Documents
drwxr-xr-x 3 198097 4096 сен  3 17:15 Downloads
-rw-rw-r-- 1 198097  339 окт  1 15:52 head.txt
drwxr-xr-x 2 198097 4096 сен  3 17:06 Music
drwxr-xr-x 2 198097 4096 сен  3 17:06 Pictures
drwxr-xr-x 2 198097 4096 сен  3 17:06 Public
-rwxrwxr-x 1 198097   12 сен  3 17:48 scr.sh
drwxr-xr-x 2 198097 4096 сен  3 17:06 Templates
drwxr-xr-x 2 198097 4096 сен  3 17:06 Videos
198097@client05:~$ ls -laF
total 168
drwx------   18 198097 198097  4096 окт  1 15:52 ./
drwxr-xr-x 1291 root   root   36864 сен  1 03:25 ../
-rw-------    1 198097 198097   839 окт  1 15:19 .bash_history
-rw-r--r--    1 198097 198097   220 сен  1  2015 .bash_logout
-rw-r--r--    1 198097 198097  3771 сен  1  2015 .bashrc
drwxrwxr-x    8 198097 198097  4096 окт  1 15:20 .cache/
drwxr-xr-x   18 198097 198097  4096 окт  1 15:53 .config/
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Desktop/
-rw-r--r--    1 198097 198097    38 окт  1 15:45 .dmrc
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Documents/
drwxr-xr-x    3 198097 198097  4096 сен  3 17:15 Downloads/
drwx------    2 198097 198097  4096 сен  3 17:31 .emacs.d/
drwx------    3 198097 198097  4096 окт  1 15:36 .gnupg/
-rw-------    1 198097 198097   566 сен  3 17:43 .gnuplot_history
-rw-rw-r--    1 198097 198097   339 окт  1 15:52 head.txt
drwxr-xr-x    3 198097 198097  4096 сен  3 17:06 .local/
drwx------    4 198097 198097  4096 сен  3 17:07 .mozilla/
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Music/
-rw-r--r--    1 198097 198097   255 окт  1 15:14 .pam_environment
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Pictures/
-rw-r--r--    1 198097 198097   655 июн 24  2016 .profile
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Public/
drwx------    2 198097 198097  4096 окт  1 15:21 .remmina/
-rwxrwxr-x    1 198097 198097    12 сен  3 17:48 scr.sh*
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Templates/
drwx------    4 198097 198097  4096 сен  3 17:10 .thumbnails/
drwxr-xr-x    2 198097 198097  4096 сен  3 17:06 Videos/
-rw-------    1 198097 198097  1156 окт  1 15:52 .viminfo
-rw-------    1 198097 198097   159 окт  1 15:45 .Xauthority
-rw-r--r--    1 198097 198097  1600 янв  9  2016 .Xdefaults
-rw-r--r--    1 198097 198097    14 янв  9  2016 .xscreensaver
-rw-------    1 198097 198097  3463 окт  1 15:45 .xsession-errors
-rw-------    1 198097 198097   279 окт  1 15:36 .xsession-
errors.old
198097@client05:~$ ruptime
Anis       down    2+22:32
DoroninOA01 down   10+03:44
Lubuntu     up      2:40,     0 users,  load 1.27, 1.38, 1.28
```

```
Mint         down     23:10
Sheylunn-UX3down 15+00:46
User         down     1+03:15
anton-PC     down     10+04:53
artem-aka-gadown 1+03:13
cameron      up       3+06:04,      1 user,    load 0.90, 2.46, 2.46
client01     down     7+22:43
client02     down     7+22:26
client04     up       2:55,        0 users,    load 0.52, 1.02, 0.56
client05     up       0:13,        1 user,    load 0.32, 0.34, 0.26
client06     up       2:52,        0 users,    load 1.38, 1.47, 1.22
client07     up       0:10,        1 user,    load 0.05, 0.40, 0.33
client18     down     28+07:33
client19     up       0:46,        1 user,    load 2.81, 1.72, 1.20
client20     down     0:40
client21     down     28+07:25
client22     up       2:55,        0 users,    load 0.34, 0.22, 0.14
denis-MacBoodown 10+05:11
dimasik-Aspidown  23:40
dread-Aspiredown 10+05:44
liza-Lenovo-down 10+03:16
nedosekovivadown 14+03:06
retupmoc     down     10+03:13
sheylunn-ux3down  23:25
sofya-Lenovodown 11+05:42
tyrypyrkin-Sdown  1+03:14
valli        up       19:15,       1 user,    load 1.41, 1.27, 1.30
valya-TM1709down  1+02:38
vanduel-GP72down  23:09
vlad-Inspirodown  1+06:55
198097@client05:~$ ruptime -a
Anis         down     2+22:33
DoroninOA01 down     10+03:45
Lubuntu      up       2:43,        2 users,    load 1.58, 1.46, 1.33
Mint         down     23:12
Sheylunn-UX3down 15+00:47
User         down     1+03:16
anton-PC     down     10+04:54
artem-aka-gadown 1+03:14
cameron      up       3+06:04,      2 users,    load 0.90, 2.46, 2.46
client01     down     7+22:45
client02     down     7+22:27
client04     up       2:55,        1 user,    load 0.52, 1.02, 0.56
client05     up       0:16,        1 user,    load 0.14, 0.22, 0.22
client06     up       2:55,        1 user,    load 1.21, 1.35, 1.20
client07     up       0:10,        1 user,    load 0.05, 0.40, 0.33
client18     down     28+07:34
client19     up       0:46,        1 user,    load 2.81, 1.72, 1.20
client20     down     0:41
client21     down     28+07:26
client22     up       2:55,        1 user,    load 0.34, 0.22, 0.14
denis-MacBoodown 10+05:12
dimasik-Aspidown  23:42
dread-Aspiredown 10+05:45
```

```
liza-Lenovo-down    10+03:17
nedosekovivadown    14+03:08
retupmoc     down   10+03:14
sheylunn-ux3down       23:27
sofya-Lenovodown    11+05:43
tyrypyrkin-Sdown     1+03:15
valli         up        19:15,      1 user,    load 1.41, 1.27, 1.30
valya-TM1709down     1+02:39
vanduel-GP72down       23:11
vlad-Inspirodown     1+06:56
198097@client05:~$ ruptime -l
client19      up         0:46,      1 user,    load 2.81, 1.72, 1.20
Lubuntu       up         2:43,      0 users,   load 1.58, 1.46, 1.33
valli         up        19:15,      1 user,    load 1.41, 1.27, 1.30
client06      up         2:55,      0 users,   load 1.21, 1.35, 1.20
cameron       up      3+06:04,      1 user,    load 0.90, 2.46, 2.46
client04      up         2:55,      0 users,   load 0.52, 1.02, 0.56
client22      up         2:55,      0 users,   load 0.34, 0.22, 0.14
client05      up         0:16,      1 user,    load 0.14, 0.22, 0.22
client07      up         0:10,      1 user,    load 0.05, 0.40, 0.33
client20     down        0:42
vanduel-GP72down       23:11
Mint         down       23:12
sheylunn-ux3down       23:27
dimasik-Aspidown       23:42
valya-TM1709down     1+02:40
artem-aka-gadown     1+03:15
tyrypyrkin-Sdown     1+03:16
User         down     1+03:16
vlad-Inspirodown     1+06:57
Anis         down     2+22:34
client02     down     7+22:27
client01     down     7+22:45
retupmoc     down    10+03:14
liza-Lenovo-down    10+03:18
DoroninOA01  down    10+03:46
anton-PC     down    10+04:54
denis-MacBoodown    10+05:13
dread-Aspiredown    10+05:46
sofya-Lenovodown    11+05:44
nedosekovivadown    14+03:08
Sheylunn-UX3down    15+00:48
client21     down    28+07:26
client18     down    28+07:34
198097@client05:~$ ruptime -r
vlad-Inspirodown     1+06:57
vanduel-GP72down       23:12
valya-TM1709down     1+02:40
valli         up        19:15,      1 user,    load 1.41, 1.27, 1.30
tyrypyrkin-Sdown     1+03:16
sofya-Lenovodown    11+05:44
sheylunn-ux3down       23:28
retupmoc     down    10+03:15
nedosekovivadown    14+03:09
```

```
liza-Lenovo-down     10+03:18
dread-Aspiredown     10+05:46
dimasik-Aspidown        23:43
denis-MacBoodown     10+05:13
client22       up        2:55,      0 users,   load 0.34, 0.22, 0.14
client21     down     28+07:27
client20     down        0:42
client19       up        0:46,      1 user,    load 2.81, 1.72, 1.20
client18     down     28+07:35
client07       up        0:13,      1 user,    load 0.00, 0.22, 0.26
client06       up        2:55,      0 users,   load 1.21, 1.35, 1.20
client05       up        0:16,      1 user,    load 0.14, 0.22, 0.22
client04       up        2:58,      0 users,   load 0.17, 0.60, 0.47
client02     down      7+22:28
client01     down      7+22:46
cameron        up      3+06:07,     1 user,    load 1.52, 2.12, 2.33
artem-aka-gadown      1+03:15
anton-PC     down     10+04:55
User         down      1+03:17
Sheylunn-UX3down     15+00:48
Mint         down        23:13
Lubuntu        up        2:43,      0 users,   load 1.58, 1.46, 1.33
DoroninOA01 down     10+03:46
Anis         down      2+22:34
198097@client05:~$ ruptime -t
cameron        up      3+06:07,     1 user,    load 1.52, 2.12, 2.33
valli          up       19:18,      1 user,    load 1.49, 1.27, 1.29
client22       up        2:58,      0 users,   load 0.01, 0.11, 0.11
client04       up        2:58,      0 users,   load 0.17, 0.60, 0.47
client06       up        2:55,      0 users,   load 1.21, 1.35, 1.20
Lubuntu        up        2:46,      0 users,   load 0.84, 1.26, 1.27
client19       up        0:49,      1 user,    load 1.36, 1.71, 1.31
client05       up        0:19,      1 user,    load 0.17, 0.16, 0.17
client07       up        0:13,      1 user,    load 0.00, 0.22, 0.26
client20     down        0:43
vanduel-GP72down        23:13
Mint         down        23:14
sheylunn-ux3down        23:29
dimasik-Aspidown        23:44
valya-TM1709down      1+02:41
artem-aka-gadown      1+03:16
tyrypyrkin-Sdown      1+03:17
User         down      1+03:18
vlad-Inspirodown      1+06:58
Anis         down      2+22:35
client02     down      7+22:29
client01     down      7+22:47
retupmoc     down     10+03:16
liza-Lenovo-down     10+03:19
DoroninOA01 down     10+03:47
anton-PC     down     10+04:56
denis-MacBoodown     10+05:14
dread-Aspiredown     10+05:47
sofya-Lenovodown     11+05:45
```

```
nedosekovivadown    14+03:10
Sheylunn-UX3down    15+00:49
client21    down    28+07:28
client18    down    28+07:36
198097@client05:~$ ruptime -u
valli          up      19:18,      1 user,    load 1.49, 1.27, 1.29
client19       up       0:49,      1 user,    load 1.36, 1.71, 1.31
cameron        up     3+06:07,     1 user,    load 1.52, 2.12, 2.33
client07       up       0:13,      1 user,    load 0.00, 0.22, 0.26
client05       up       0:19,      1 user,    load 0.17, 0.16, 0.17
client04       up       2:58,      0 users,   load 0.17, 0.60, 0.47
client06       up       2:58,      0 users,   load 0.78, 1.21, 1.18
Lubuntu        up       2:46,      0 users,   load 0.84, 1.26, 1.27
client22       up       2:58,      0 users,   load 0.01, 0.11, 0.11
client20       down      0:45
vanduel-GP72down     23:14
Mint           down     23:15
sheylunn-ux3down     23:30
dimasik-Aspidown     23:45
valya-TM1709down     1+02:43
artem-aka-gadown     1+03:18
tyrypyrkin-Sdown     1+03:18
User           down    1+03:19
vlad-Inspirodown     1+06:59
Anis           down    2+22:36
client02       down    7+22:30
client01       down    7+22:48
retupmoc       down   10+03:17
liza-Lenovo-down    10+03:20
DoroninOA01 down     10+03:49
anton-PC       down   10+04:57
denis-MacBoodown    10+05:16
dread-Aspiredown    10+05:49
sofya-Lenovodown    11+05:46
nedosekovivadown    14+03:11
Sheylunn-UX3down    15+00:50
client21    down    28+07:29
client18    down    28+07:37
198097@client05:~$ rwho
198082   client19:tty7 Oct  1 15:14 :48
198096   client07:tty7 Oct  1 15:53 :15
198097   client05:tty7 Oct  1 15:45 :18
198135   cameron:pts/5 Oct  1 15:00 :59
artem    valli::0      Oct  1 00:09
198097@client05:~$ whoami
198097
198097@client05:~$ tty
/dev/pts/0
198097@client05:~$ hostname
client05
198097@client05:~$ hostname -i
127.0.1.1
198097@client05:~$ hostname -a
```

```
198097@client05:~$ uname
Linux
198097@client05:~$ uname -a
Linux client05 4.10.0-19-generic #21-Ubuntu SMP Thu Apr 6 17:03:14
UTC 2017 i686 i686 i686 GNU/Linux
198097@client05:~$ pwd
/stud/198097
198097@client05:~$ who
198097   tty7         2019-10-01 15:45 (:0)
198097@client05:~$ who -b
        system boot  2019-10-01 15:43
198097@client05:~$ who -u
198097   tty7         2019-10-01 15:45 00:27        1051 (:0)
198097@client05:~$ cd /
198097@client05:/$ pwd
/
198097@client05:/$ cd /bin
198097@client05:/bin$ ls -aF
./              fusermount*   nisdomainname@  static-sh@
../             getfacl*      ntfs-3g*        stty*
bash*           grep*         ntfs-3g.probe*  su*
bunzip2*        gunzip*       ntfscat*        sync*
busybox*        gzexe*        ntfscluster*    systemctl*
bzcat*          gzip*         ntfscmp*        systemd@
bzcmp@          hciconfig*    ntfsfallocate*  systemd-ask-password*
bzdiff*         hostname*     ntfsfix*        systemd-escape*
bzegrep@        ip*           ntfsinfo*       systemd-hwdb*
bzexe*          journalctl*   ntfsls*         systemd-inhibit*
bzfgrep@        kbd_mode*     ntfsmove*       systemd-machine-id-
setup*
bzgrep*         keyctl*       ntfsrecover*    systemd-notify*
bzip2*          kill*         ntfssecaudit*   systemd-sysusers*
bzip2recover*   kmod*         ntfstruncate*   systemd-tmpfiles*
bzless@         less*         ntfsusermap*    systemd-tty-ask-
password-agent*
bzmore*         lessecho*     ntfswipe*       tailf*
cat*            lessfile@     open@           tar*
chacl*          lesskey*      openvt*         tempfile*
chgrp*          lesspipe*     pax*            touch*
chmod*          ln*           paxcpio@        true*
chown*          loadkeys*     paxtar@         udevadm*
chvt*           login*        pidof@          ulockmgr_server*
cp*             loginctl*     ping*           umount*
cpio*           lowntfs-3g*   ping4@          uname*
dash*           ls*           ping6@          uncompress*
date*           lsblk*        plymouth*       unicode_start*
dd*             lsmod@        ps*             vdir*
df*             markov*       pwd*            VTM_diagram*
dir*            mkdir*        rbash@          wdctl*
dmesg*          mknod*        readlink*       which*
dnsdomainname@  mktemp*       red*            whiptail*
domainname@     more*         rm*             ypdomainname@
dumpkeys*       mount*        rmdir*          zcat*
echo*           mountpoint*   rnano@          zcmp*
```

```
ed*             mt@             run-parts*      zdiff*
efibootdump*    mt-gnu*         sed*            zegrep*
efibootmgr*     mv*             setfacl*        zfgrep*
egrep*          nano*           setfont*        zforce*
false*          nc@             setupcon*       zgrep*
fgconsole*      nc.openbsd*     sh@             zless*
fgrep*          netcat@         sh.distrib@     zmore*
findmnt*        netstat*        sleep*          znew*
fuser*          networkctl*     ss*
198097@client05:/bin$ cd ~
198097@client05:~$ cd ..
198097@client05:/stud$ cd ~
198097@client05:~$ cat > f1.txt
Str1
Str2
Str3
Str4
Str5
198097@client05:~$ ls
Desktop     Downloads  head.txt  Pictures  scr.sh      Videos
Documents  f1.txt      Music     Public    Templates
198097@client05:~$ cat f1.txt
Str1
Str2
Str3
Str4
Str5
198097@client05:~$ cat f1.txt >> f2.txt
198097@client05:~$ cat f2.txt
Str1
Str2
Str3
Str4
Str5
198097@client05:~$ rm f2.txt
198097@client05:~$ cp f1.txt f2.txt
198097@client05:~$ cat f1.txt f2.txt >> f3.txt
198097@client05:~$ cat f3.txt
Str1
Str2
Str3
Str4
Str5
Str1
Str2
Str3
Str4
Str5
198097@client05:~$ rm f2.txt f3.txt
198097@client05:~$ mkdir lab
198097@client05:~$ mkdir course
198097@client05:~$ cp f1.txt lab/
198097@client05:~$ cp f1.txt course/
198097@client05:~$ ls lab
```

```
f1.txt
198097@client05:~$ ls course
f1.txt
198097@client05:~$ cd lab
198097@client05:~/lab$ rm ../f1.txt
198097@client05:~/lab$ ls
f1.txt
198097@client05:~/lab$ rm f1.txt
198097@client05:~/lab$ cd ~
198097@client05:~$ rm -rf lab
198097@client05:~$ rm -rf course
198097@client05:~$ date
Вт окт  1 16:17:24 EET 2019
198097@client05:~$ touch f1.txt
198097@client05:~$ cat > f1.txt
Str1
Str2
Str3
Str4
Str5
Str6
Str7
Str8
198097@client05:~$ md5sum f1.txt
e786addfc82b230a81816d8b50501a55  f1.txt
198097@client05:~$ echo 'Hello world!' >> f1.txt
198097@client05:~$ nl f1.txt
     1  Str1
     2  Str2
     3  Str3
     4  Str4
     5  Str5
     6  Str6
     7  Str7
     8  Str8
     9  Hello world!
198097@client05:~$ od f1.txt
0000000 072123 030562 051412 071164 005062 072123 031562 051412
0000020 071164 005064 072123 032562 051412 071164 005066 072123
0000040 033562 051412 071164 005070 062510 066154 020157 067567
0000060 066162 020544 000012
0000065
198097@client05:~$ tail f1.txt
Str1
Str2
Str3
Str4
Str5
Str6
Str7
Str8
Hello world!
198097@client05:~$ tail -n 2 f1.txt
Str8
```

```
Hello world!
198097@client05:~$ split f1.txt
198097@client05:~$ wc f1.txt
 9 10 53 f1.txt
198097@client05:~$ du f1.txt
4       f1.txt
198097@client05:~$ echo 'Something!'
Something!
198097@client05:~$ env
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd
=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:t
w=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;
31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzm
a=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:
*.z=01;31:*.Z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.l
zo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:
*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01
;
31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace
=01;31:*.zoo=01;31:*.cpio=01;31:*.
7z=01;31:*.rz=01;31:*.cab=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;3
5:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.pp
m=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35
:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=
01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:
*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01
;
35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc
=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.x
cf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35
:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=0
0;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.
ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;
36:
LC_MEASUREMENT=ru_RU.UTF-8
_LXSESSION_PID=1051
XDG_CONFIG_HOME=/stud/198097/.config
LESSCLOSE=/usr/bin/lesspipe %s %s
LC_PAPER=ru_RU.UTF-8
LC_MONETARY=ru_RU.UTF-8
XDG_MENU_PREFIX=lxde-
LANG=en_US.UTF-8
GDM_LANG=ru
DISPLAY=:0
QT_STYLE_OVERRIDE=gtk
GTK_OVERLAY_SCROLLING=0
XDG_VTNR=7
SSH_AUTH_SOCK=/tmp/ssh-E3NoJQwtf8GW/agent.1051
LC_NAME=ru_RU.UTF-8
XDG_SESSION_ID=c2
XDG_GREETER_DATA_DIR=/var/lib/lightdm-data/198097
USER=198097
DESKTOP_SESSION=Lubuntu
QT_QPA_PLATFORMTHEME=lxqt
```

```
PWD=/stud/198097
HOME=/stud/198097
SSH_AGENT_PID=1113
QT_ACCESSIBILITY=1
XDG_SESSION_TYPE=x11
QT_PLATFORM_PLUGIN=lxqt
XDG_DATA_DIRS=/etc/xdg/lubuntu:/usr/local/share:/usr/share:/usr/
share/gdm:/var/lib/menu-xdg:/usr/share/Lubuntu:/usr/local/share/:/
usr/share/:/var/lib/snapd/desktop
XDG_SESSION_DESKTOP=Lubuntu
LC_ADDRESS=ru_RU.UTF-8
LC_NUMERIC=ru_RU.UTF-8
PAPERSIZE=a4
TERM=xterm
SHELL=/bin/bash
XDG_SEAT_PATH=/org/freedesktop/DisplayManager/Seat0
XDG_CURRENT_DESKTOP=LXDE
QT_LINUX_ACCESSIBILITY_ALWAYS_ON=1
XDG_SEAT=seat0
SHLVL=1
LANGUAGE=en
LC_TELEPHONE=ru_RU.UTF-8
GDMSESSION=Lubuntu
LOGNAME=198097
DBUS_SESSION_BUS_ADDRESS=unix:path=/run/user/198097/bus
XDG_RUNTIME_DIR=/run/user/198097
QT_XCB_FORCE_SOFTWARE_OPENGL=1
XAUTHORITY=/stud/198097/.Xauthority
XDG_SESSION_PATH=/org/freedesktop/DisplayManager/Session0
XDG_CONFIG_DIRS=/etc/xdg/lubuntu:/etc/xdg/xdg-Lubuntu:/etc/xdg
PATH=/stud/198097/bin:/stud/198097/.local/bin:/usr/local/sbin:/usr/
local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/
games:/snap/bin
LC_IDENTIFICATION=ru_RU.UTF-8
LESSOPEN=| /usr/bin/lesspipe %s
LC_TIME=ru_RU.UTF-8
_=/usr/bin/env
OLDPWD=/stud/198097/lab
198097@client05:~$ factor 100
100: 2 2 5 5
198097@client05:~$ pinky
Login     Name                TTY      Idle   When              Where
198097    М8О-104Б-19 Че  tty7      00:37  2019-10-01 15:45 :0
198097@client05:~$ seq 1 1 100
1
2
3
4
5
6
7
8
9
10
```

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64

```
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
198097@client05:~$ shuf f1.txt
Hello world!
Str7
Str1
Str6
Str3
Str8
Str2
Str4
Str5
198097@client05:~$ shuf -e str1 str2 str3
str3
str1
str2
198097@client05:~$ fmt f1.txt
Str1 Str2 Str3 Str4 Str5 Str6 Str7 Str8 Hello world!
198097@client05:~$ base64 f1.txt
```
U3RyMQpTdHIyClN0cjMKU3RyNApTdHI1ClN0cjYKU3RyNwpTdHI4CkhlbGxvIHdvcmxk

```
IQo=
198097@client05:~$ base64 --version
base64 (GNU coreutils) 8.26
Copyright (C) 2016 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/
gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Simon Josefsson.
198097@client05:~$ sha1sum f1.txt
c7a7710033aad8c6881017adfc89b65e1e7975fd  f1.txt
198097@client05:~$ yes hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
hello
^Cllo
```