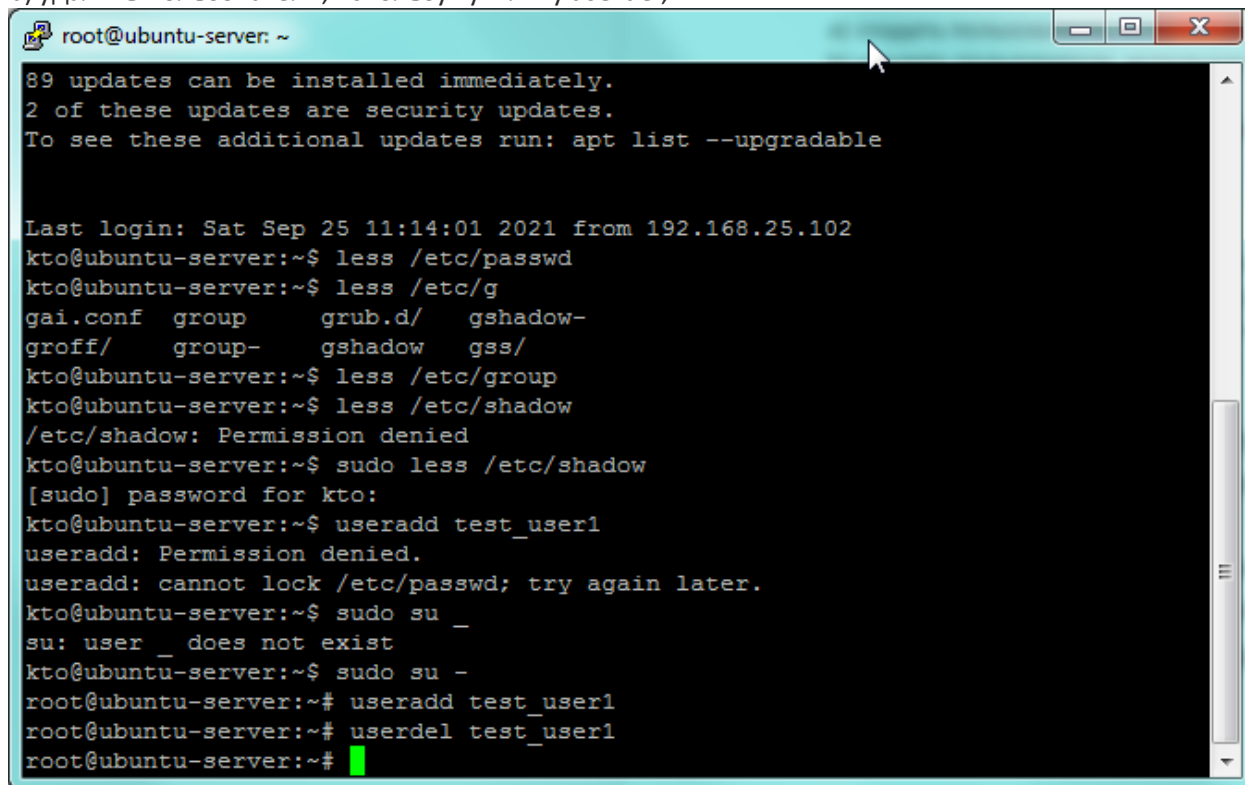


## Домашнее задание Урок 3

### 1. Управление пользователями:

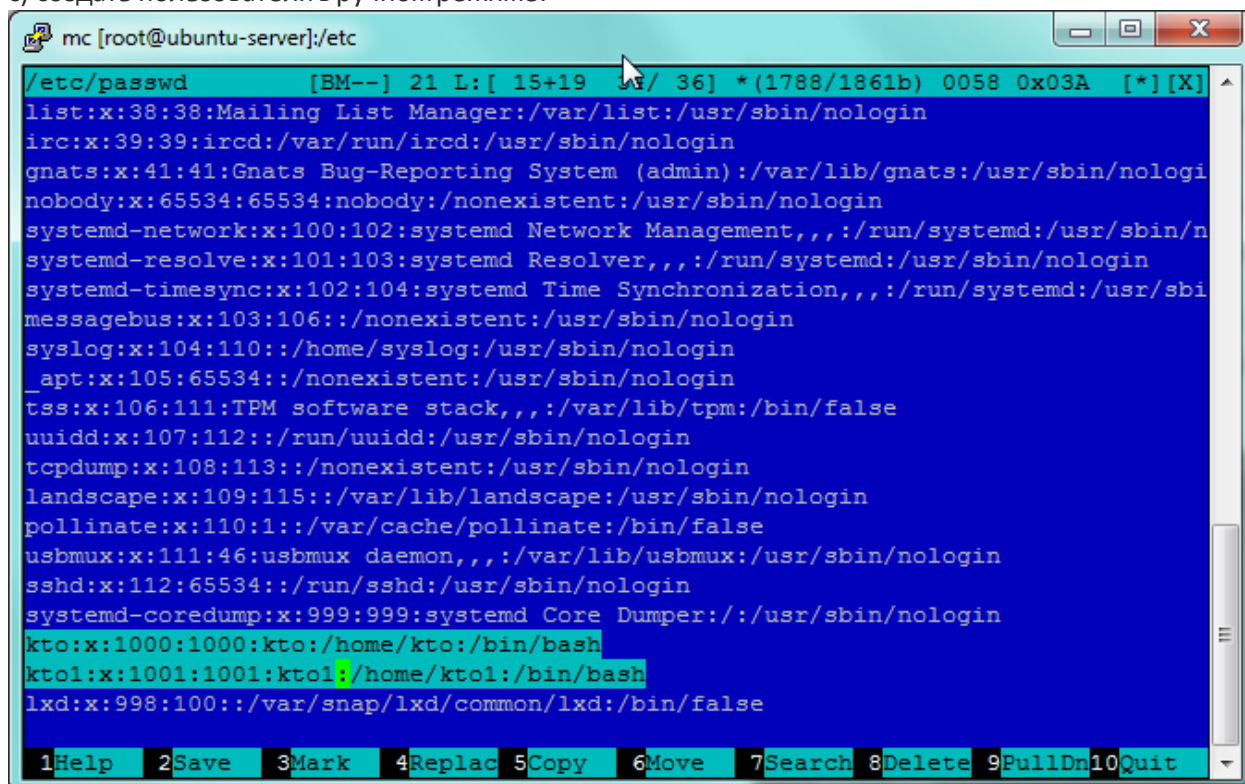
- а) создать пользователя, используя утилиту useradd;
- б) удалить пользователя, используя утилиту userdel;



```
root@ubuntu-server: ~
89 updates can be installed immediately.
2 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Sep 25 11:14:01 2021 from 192.168.25.102
kto@ubuntu-server:~$ less /etc/passwd
kto@ubuntu-server:~$ less /etc/g
gai.conf group grub.d/ gshadow-
groff/ group- gshadow gss/
kto@ubuntu-server:~$ less /etc/group
kto@ubuntu-server:~$ less /etc/shadow
/etc/shadow: Permission denied
kto@ubuntu-server:~$ sudo less /etc/shadow
[sudo] password for kto:
kto@ubuntu-server:~$ useradd test_user1
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
kto@ubuntu-server:~$ sudo su -
su: user _ does not exist
kto@ubuntu-server:~$ sudo su -
root@ubuntu-server:~# useradd test_user1
root@ubuntu-server:~# userdel test_user1
root@ubuntu-server:~#
```

- в) создать пользователя в ручном режиме.



```
mc [root@ubuntu-server]:/etc
/etc/passwd [BM--] 21 L:[ 15+19 36] *(1788/1861b) 0058 0x03A [*][X]
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/n
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbi
messagebus:x:103:106:./nonexistent:/usr/sbin/nologin
syslog:x:104:110:./home/syslog:/usr/sbin/nologin
_apt:x:105:65534:./nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uidd:x:107:112:./run/uidd:/usr/sbin/nologin
tcpdump:x:108:113:./nonexistent:/usr/sbin/nologin
landscape:x:109:115:./var/lib/landscape:/usr/sbin/nologin
pollinate:x:110:1:./var/cache/pollinate:/bin/false
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
sshd:x:112:65534:./run/sshd:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:./usr/sbin/nologin
kto:x:1000:1000:kto:/home/kto:/bin/bash
kto1:x:1001:1001:kto1:/home/kto1:/bin/bash
lxd:x:998:100:./var/snap/lxd/common/lxd:/bin/false

1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn10Quit
```

```
mc [root@ubuntu-server]:/etc
/etc/group [BM--] 0 L:[ 38+21 59/ 59] *(782 / 782b) <EOF> [*][X]
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
systemd-timesync:x:104:
crontab:x:105:
messagebus:x:106:
input:x:107:
kvm:x:108:
render:x:109:
syslog:x:110:
tss:x:111:
uidd:x:112:
tcpdump:x:113:
ssh:x:114:
landscape:x:115:
lxd:x:116:kto
systemd-coredump:x:999:
kto:x:1000:
kto1:x:1001:
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn10Quit
```

```
root@ubuntu-server: /etc
root@ubuntu-server:/etc# chown kto1:kto1 /home/kto1
root@ubuntu-server:/etc# usermod
Usage: usermod [options] LOGIN

Options:
  -b, --badnames          allow bad names
  -c, --comment COMMENT   new value of the GECOS field
  -d, --home HOME_DIR     new home directory for the user account
  -e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE  set password inactive after expiration
                           to INACTIVE
  -g, --gid GROUP          force use GROUP as new primary group
  -G, --groups GROUPS      new list of supplementary GROUPS
  -a, --append             append the user to the supplemental GROUPS
                           mentioned by the -G option without removing
                           the user from other groups
  -h, --help              display this help message and exit
  -l, --login NEW_LOGIN    new value of the login name
  -L, --lock              lock the user account
  -m, --move-home         move contents of the home directory to the
                           new location (use only with -d)
  -o, --non-unique         allow using duplicate (non-unique) UID
  -p, --password PASSWORD  use encrypted password for the new password
  -R, --root CHROOT_DIR    directory to chroot into
```

```
root@ubuntu-server: ~  
-i, --inactive INACTIVE      set password inactive after expiration  
                             to INACTIVE  
-l, --lock                   lock the password of the named account  
-n, --mindays MIN_DAYS      set minimum number of days before password  
                             change to MIN_DAYS  
-q, --quiet                  quiet mode  
-r, --repository REPOSITORY change password in REPOSITORY repository  
-R, --root CHROOT_DIR       directory to chroot into  
-S, --status                 report password status on the named account  
-u, --unlock                 unlock the password of the named account  
-w, --warndays WARN_DAYS    set expiration warning days to WARN_DAYS  
-x, --maxdays MAX_DAYS     set maximum number of days before password  
                             change to MAX_DAYS  
  
root@ubuntu-server:~# passwd ktol  
New password:  
Retype new password:  
passwd: password updated successfully  
root@ubuntu-server:~# su ktol  
ktol@ubuntu-server:/root$ logout  
bash: logout: not login shell: use `exit`  
ktol@ubuntu-server:/root$ exit  
exit  
root@ubuntu-server:~#
```

## 2. Управление группами:

а) создать группу с использованием утилит в ручном режиме (сделал выше);

```
root@ubuntu-server: ~  
-l, --lock                   lock the password of the named account  
-n, --mindays MIN_DAYS      set minimum number of days before password  
                             change to MIN_DAYS  
-q, --quiet                  quiet mode  
-r, --repository REPOSITORY change password in REPOSITORY repository  
-R, --root CHROOT_DIR       directory to chroot into  
-S, --status                 report password status on the named account  
-u, --unlock                 unlock the password of the named account  
-w, --warndays WARN_DAYS    set expiration warning days to WARN_DAYS  
-x, --maxdays MAX_DAYS     set maximum number of days before password  
                             change to MAX_DAYS  
  
root@ubuntu-server:~# passwd ktol  
New password:  
Retype new password:  
passwd: password updated successfully  
root@ubuntu-server:~# su ktol  
ktol@ubuntu-server:/root$ logout  
bash: logout: not login shell: use `exit`  
ktol@ubuntu-server:/root$ exit  
exit  
root@ubuntu-server:~# groupadd my_group  
root@ubuntu-server:~#
```

b) попрактиковаться в смене группы пользователей;

```
root@ubuntu-server: ~
-q, --quiet                quiet mode
-r, --repository REPOSITORY  change password in REPOSITORY repository
-R, --root CHROOT_DIR        directory to chroot into
-S, --status                report password status on the named account
-u, --unlock                unlock the password of the named account
-w, --warndays WARN_DAYS    set expiration warning days to WARN_DAYS
-x, --maxdays MAX_DAYS     set maximum number of days before password
                             change to MAX_DAYS

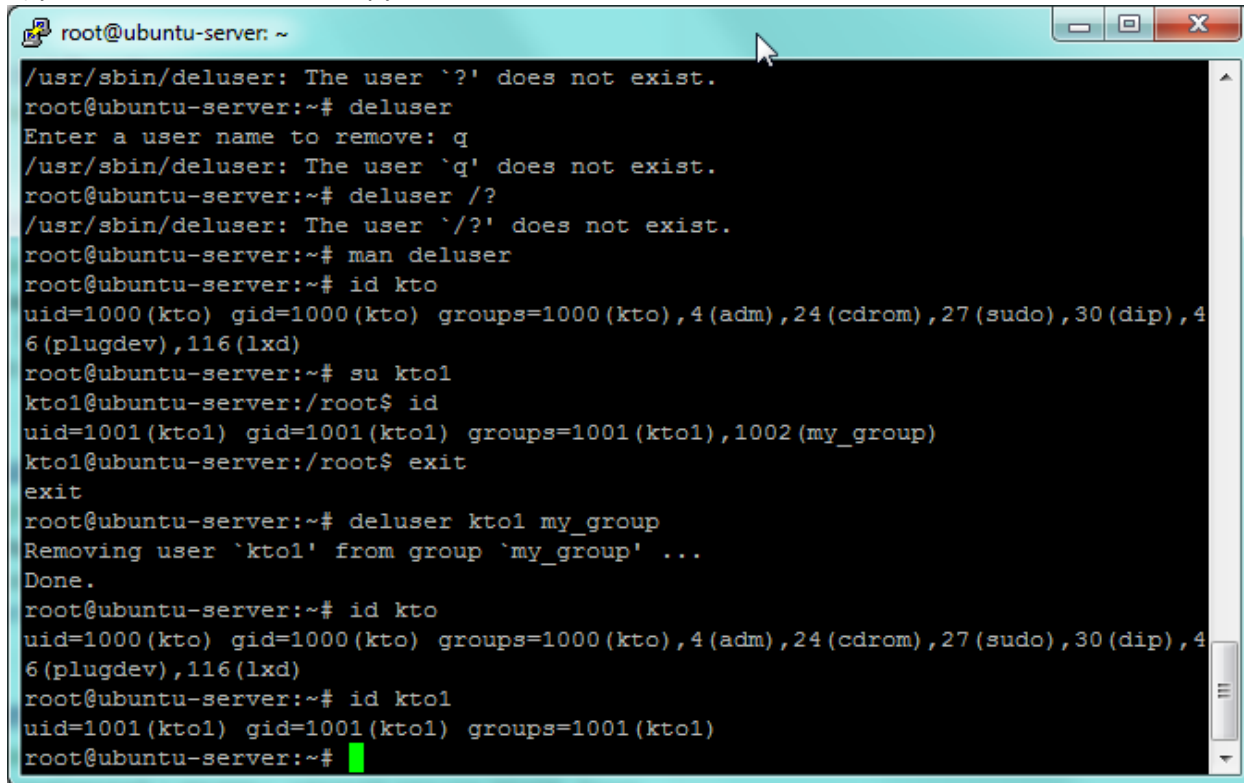
root@ubuntu-server:~# passwd ktol
New password:
Retype new password:
passwd: password updated successfully
root@ubuntu-server:~# su ktol
ktol@ubuntu-server:/root$ logout
bash: logout: not login shell: use `exit'
ktol@ubuntu-server:/root$ exit
exit
root@ubuntu-server:~# groupadd my_group
root@ubuntu-server:~# usermod -g my_group ktol
root@ubuntu-server:~# less /etc/passwd
root@ubuntu-server:~# usermod -g ktol ktol
root@ubuntu-server:~# less /etc/passwd
root@ubuntu-server:~#
```

с) добавить пользователя в группу, не меняя основной;

```
root@ubuntu-server: ~
-h, --help                display this help message and exit
-l, --login NEW_LOGIN      new value of the login name
-L, --lock                lock the user account
-m, --move-home            move contents of the home directory to the
                             new location (use only with -d)
-o, --non-unique           allow using duplicate (non-unique) UID
-p, --password PASSWORD    use encrypted password for the new password
-R, --root CHROOT_DIR      directory to chroot into
-P, --prefix PREFIX_DIR    prefix directory where are located the /etc/* files
-s, --shell SHELL          new login shell for the user account
-u, --uid UID              new UID for the user account
-U, --unlock                unlock the user account
-v, --add-subuids FIRST-LAST  add range of subordinate uids
-V, --del-subuids FIRST-LAST  remove range of subordinate uids
-w, --add-subgids FIRST-LAST  add range of subordinate gids
-W, --del-subgids FIRST-LAST  remove range of subordinate gids
-Z, --selinux-user SEUSER    new SELinux user mapping for the user account

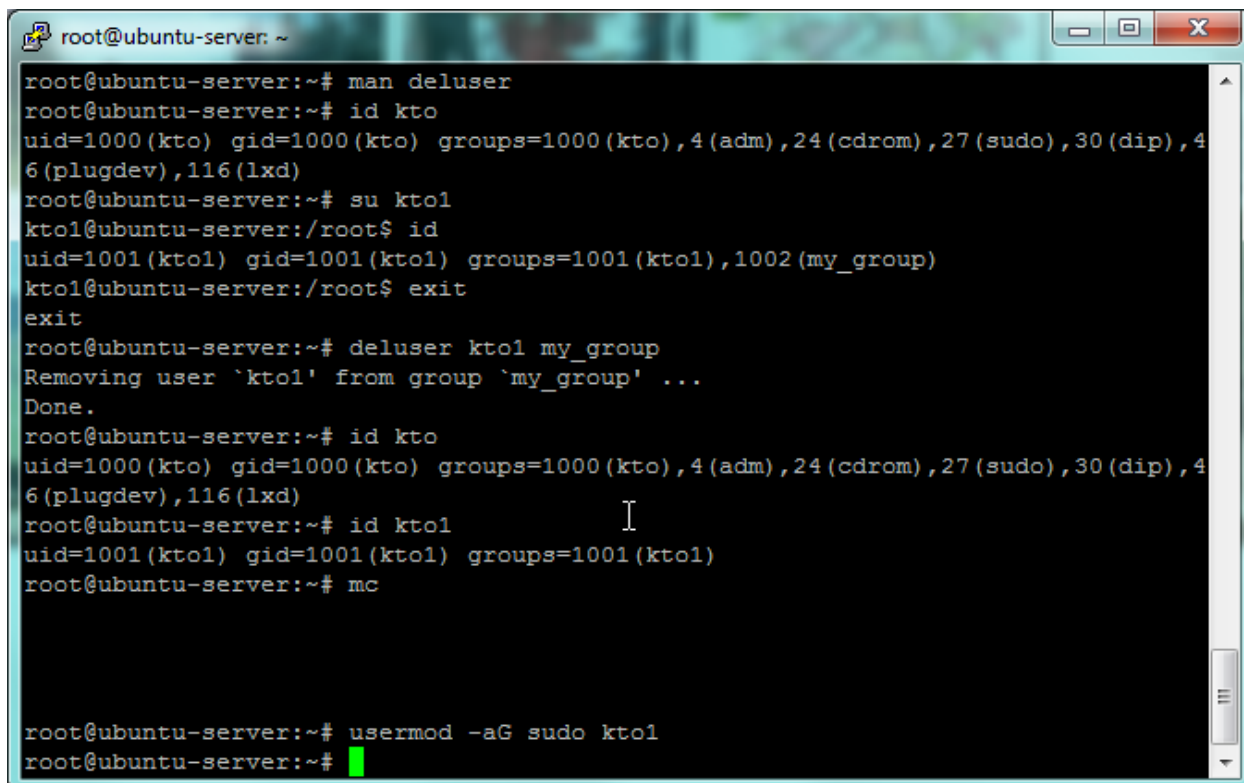
root@ubuntu-server:~# usermod -aG my_group ktol
root@ubuntu-server:~# less /etc/group
groff/ group group-
root@ubuntu-server:~# less /etc/group
root@ubuntu-server:~#
```

d) удалить пользователя из группы.



```
root@ubuntu-server: ~  
/usr/sbin/deluser: The user `?' does not exist.  
root@ubuntu-server:~# deluser  
Enter a user name to remove: q  
/usr/sbin/deluser: The user `q' does not exist.  
root@ubuntu-server:~# deluser /?  
/usr/sbin/deluser: The user `/?' does not exist.  
root@ubuntu-server:~# man deluser  
root@ubuntu-server:~# id kto  
uid=1000(kto) gid=1000(kto) groups=1000(kto),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)  
root@ubuntu-server:~# su kto1  
kto1@ubuntu-server:/root$ id  
uid=1001(kto1) gid=1001(kto1) groups=1001(kto1),1002(my_group)  
kto1@ubuntu-server:/root$ exit  
exit  
root@ubuntu-server:~# deluser kto1 my_group  
Removing user `kto1' from group `my_group' ...  
Done.  
root@ubuntu-server:~# id kto  
uid=1000(kto) gid=1000(kto) groups=1000(kto),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)  
root@ubuntu-server:~# id kto1  
uid=1001(kto1) gid=1001(kto1) groups=1001(kto1)  
root@ubuntu-server:~#
```

**3. Создать пользователя с правами суперпользователя. Сделать так, чтобы sudo не требовал пароль для выполнения команд.**



```
root@ubuntu-server: ~  
root@ubuntu-server:~# man deluser  
root@ubuntu-server:~# id kto  
uid=1000(kto) gid=1000(kto) groups=1000(kto),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)  
root@ubuntu-server:~# su kto1  
kto1@ubuntu-server:/root$ id  
uid=1001(kto1) gid=1001(kto1) groups=1001(kto1),1002(my_group)  
kto1@ubuntu-server:/root$ exit  
exit  
root@ubuntu-server:~# deluser kto1 my_group  
Removing user `kto1' from group `my_group' ...  
Done.  
root@ubuntu-server:~# id kto  
uid=1000(kto) gid=1000(kto) groups=1000(kto),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lxd)  
root@ubuntu-server:~# id kto1  
uid=1001(kto1) gid=1001(kto1) groups=1001(kto1)  
root@ubuntu-server:~# mc  
  
root@ubuntu-server:~# usermod -aG sudo kto1  
root@ubuntu-server:~#
```

Ubuntu-server (Снимок 4) [Работает] - Oracle VM VirtualBox

Файл Машина Вид Ввод Устройства Справка

\* Support: <https://ubuntu.com/advantage>

System information as of Sat 25 Sep 2021 06:16:06 PM UTC

System load: 0.02 Processes: 118  
Usage: 16.5% of 0.78GB Memory: 1.0GB used of 1.0GB  
Swap: 0.0% of 0.0GB

\* Super user access

footprint

https://

89 updates available  
2 of them need a reboot  
To see the details type

The program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

Ubuntu comes with ABSOLUTELY NO WARRANTY; to the extent permitted by applicable law.

kt01@ubuntu-server:~\$ sudo su -  
root@ubuntu-server:~#

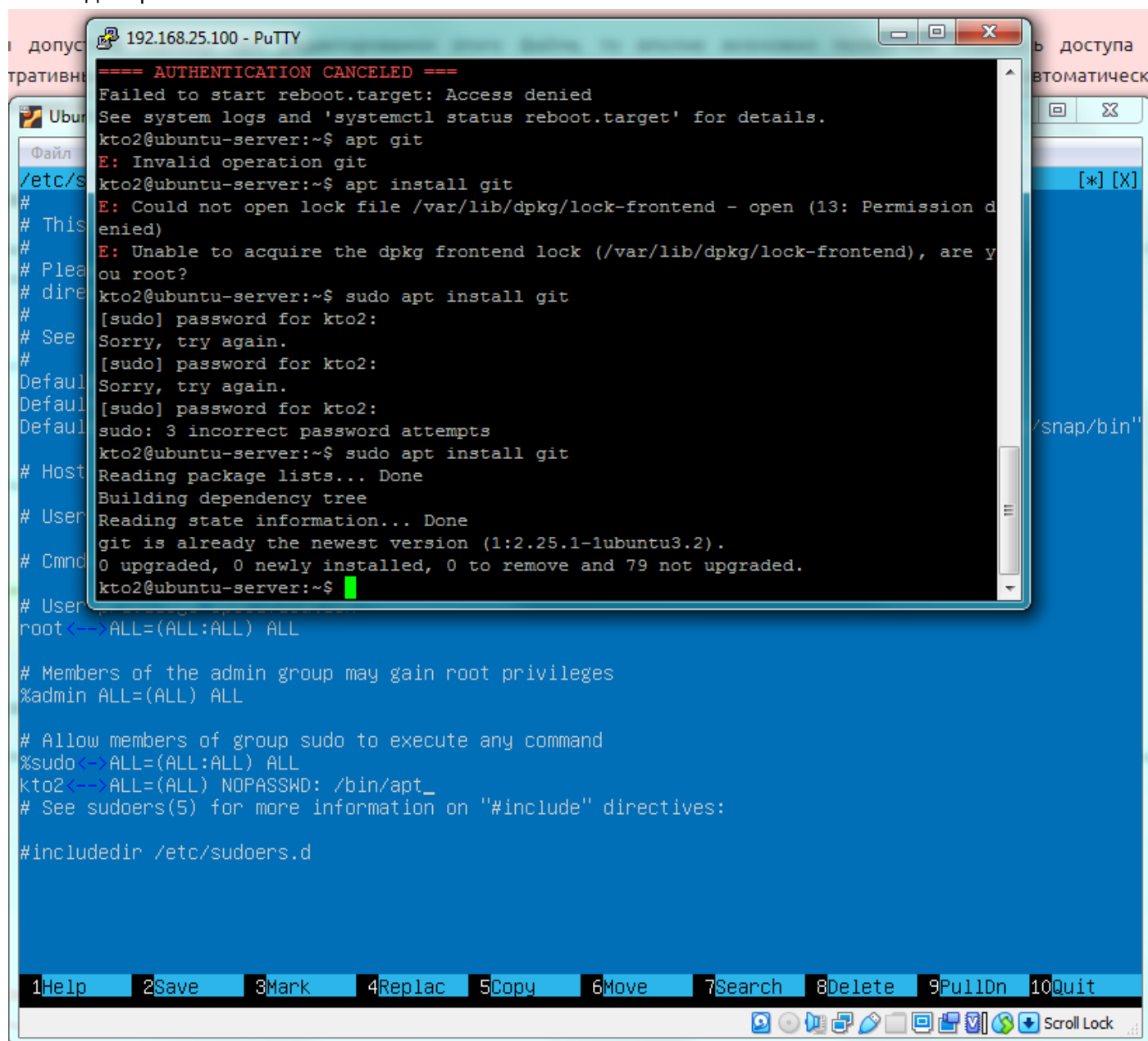
mc [root@ubuntu-server]:/etc

```
/etc/sudoers  [----] 0 L:[ 10+21 31/ 31] *(782 / 782b) <EOF>  [*] [X]
Defaults<----->mail_badpass
Defaults<----->secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/usr/libexec/sudo:/usr/games"
# Host alias specification
# User alias specification
# Cmnd alias specification
# User privilege specification
root<-->ALL=(ALL:ALL) ALL
# Members of the admin group may gain root privileges
%admin ALL=(ALL) ALL
# Allow members of group sudo to execute any command
%sudo<-->ALL=(ALL:ALL) ALL
kt01<-->ALL=(ALL) NOPASSWD:ALL
# See sudoers(5) for more information on "#include" directives:
#include /etc/sudoers.d
1Help 2Save 3Mark 4Replac 5Copy 6Move 7Search 8Delete 9PullDn10Quit
```



#### 4. \* Используя дополнительные материалы, выдать одному из созданных пользователей право на выполнение ряда команд, требующих прав суперпользователя (команды выбираем на своё усмотрение).

Если я верно понял задание, через файл sudoers я разрешил пользователю kto2 устанавливать приложения без ввода пароля.



The screenshot shows a terminal window titled "192.168.25.100 - PuTTY". The user kto2 is at the prompt. The terminal output is as follows:

```
==== AUTHENTICATION CANCELED ====
Failed to start reboot.target: Access denied
See system logs and 'systemctl status reboot.target' for details.
kto2@ubuntu-server:~$ apt git
E: Invalid operation git
kto2@ubuntu-server:~$ apt install git
E: Could not open lock file /var/lib/dpkg/lock-frontent - open (13: Permission denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontent), are you root?
kto2@ubuntu-server:~$ sudo apt install git
[sudo] password for kto2:
Sorry, try again.
[sudo] password for kto2:
Sorry, try again.
[sudo] password for kto2:
sudo: 3 incorrect password attempts
kto2@ubuntu-server:~$ sudo apt install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
git is already the newest version (1:2.25.1-1ubuntu3.2).
0 upgraded, 0 newly installed, 0 to remove and 79 not upgraded.
kto2@ubuntu-server:~$
```

The terminal window is overlaid on a background showing a file manager and a terminal window with the following content:

```
root<-->ALL=(ALL:ALL) ALL

# Members of the admin group may gain root privileges
%admin ALL=(ALL) ALL

# Allow members of group sudo to execute any command
%sudo<-->ALL=(ALL:ALL) ALL
kto2<-->ALL=(ALL) NOPASSWD: /bin/apt_
# See sudoers(5) for more information on "#include" directives:

#includedir /etc/sudoers.d
```

At the bottom of the terminal window, there is a menu bar with the following options: 1Help, 2Save, 3Mark, 4Replac, 5Copy, 6Move, 7Search, 8Delete, 9PullDn, 10Quit. Below the menu bar is a status bar with icons for various system functions and a "Scroll Lock" indicator.