

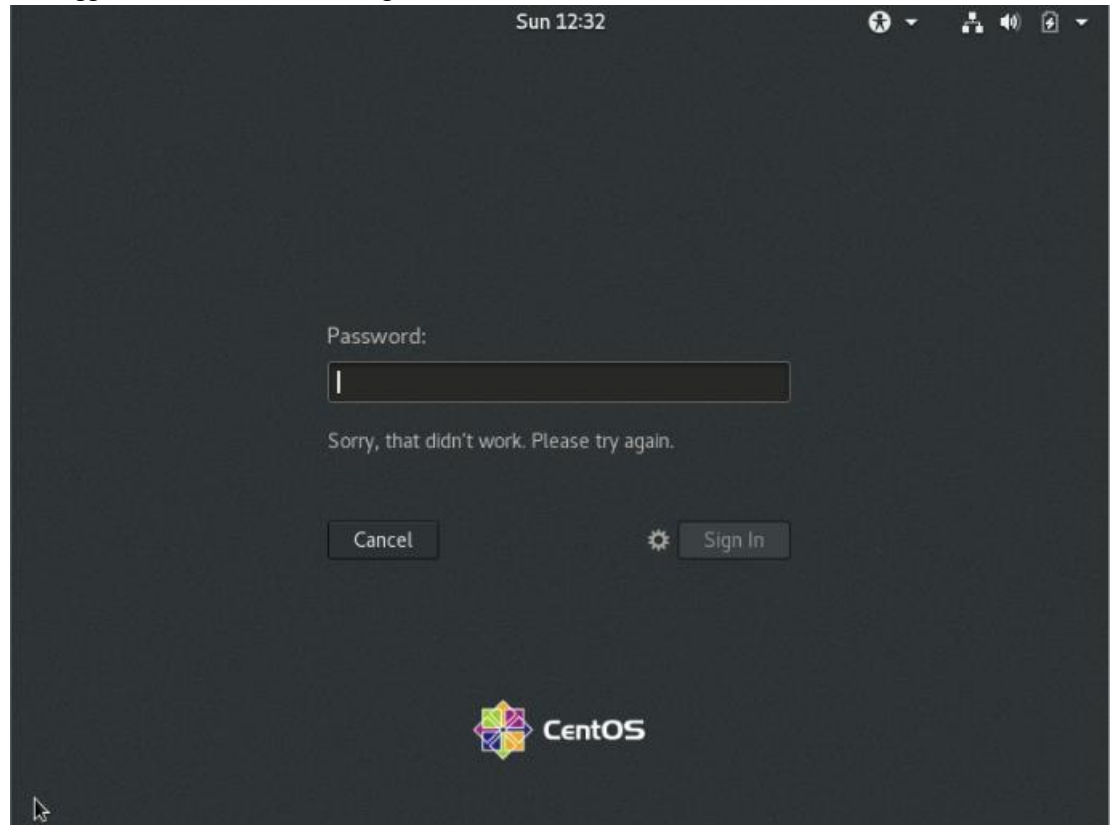


Name-Ahmad Raza

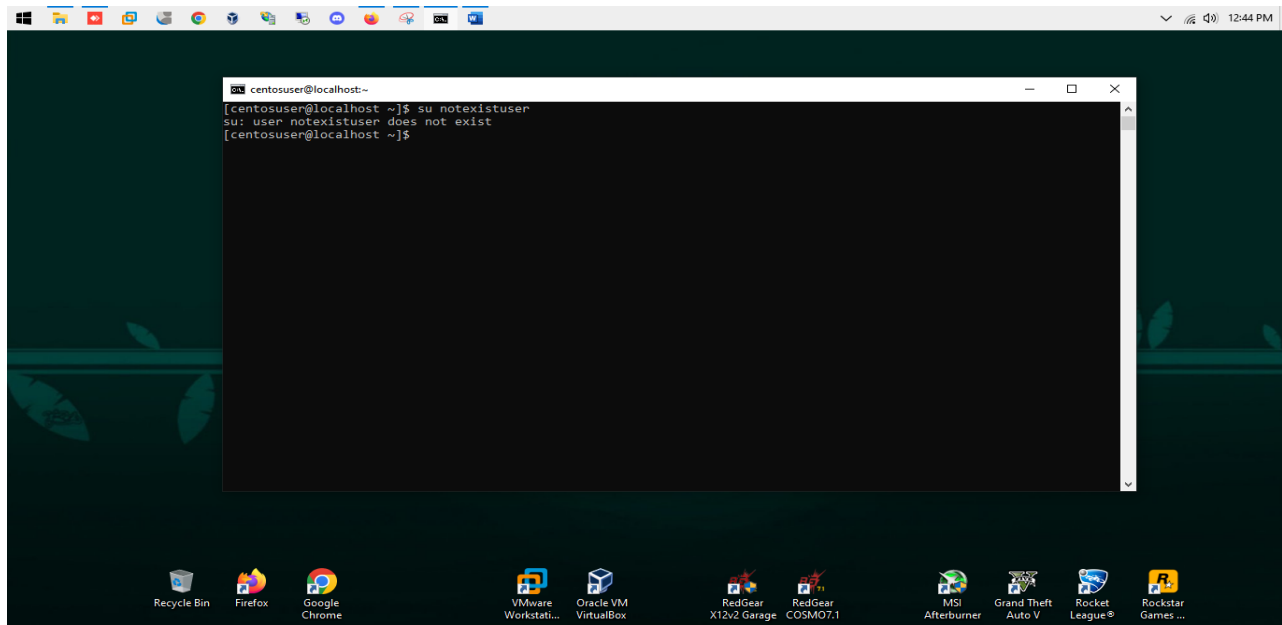
Course-DevOPS PRO

# 1. Assignment- 01

- As I logged nonexistent user through GUI, it throws error

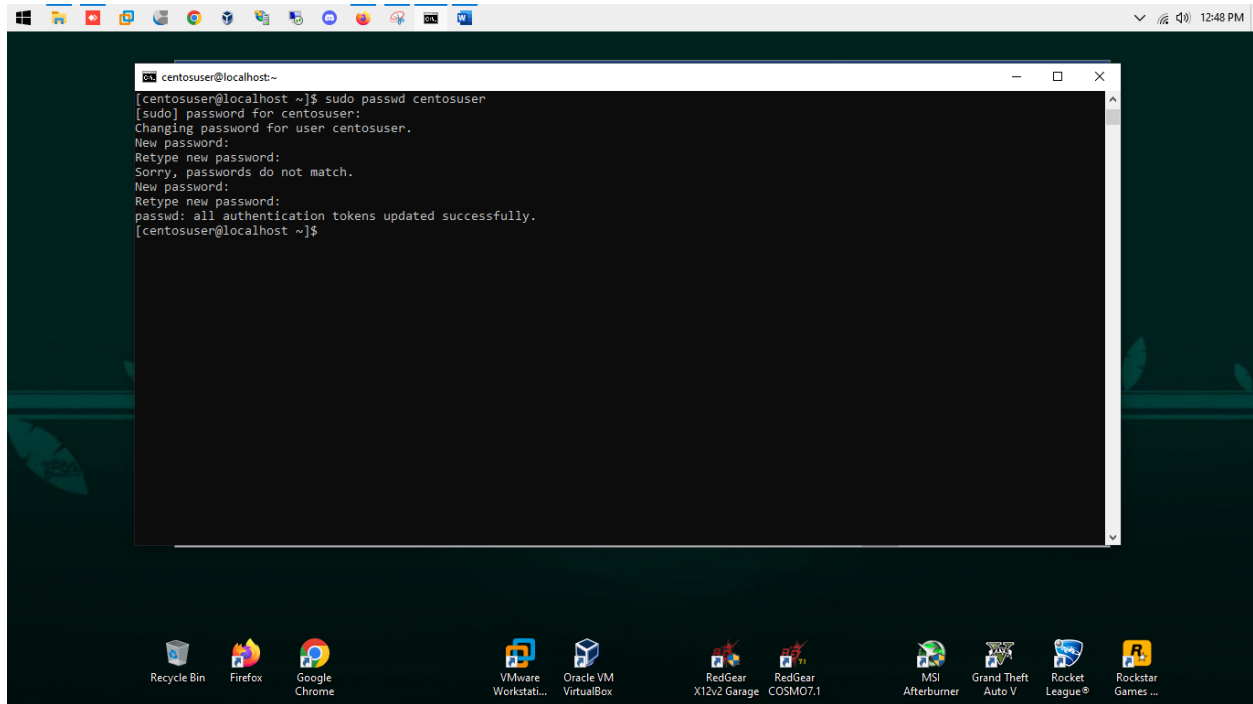


- As I logged nonexistent user through CLI, it throws error

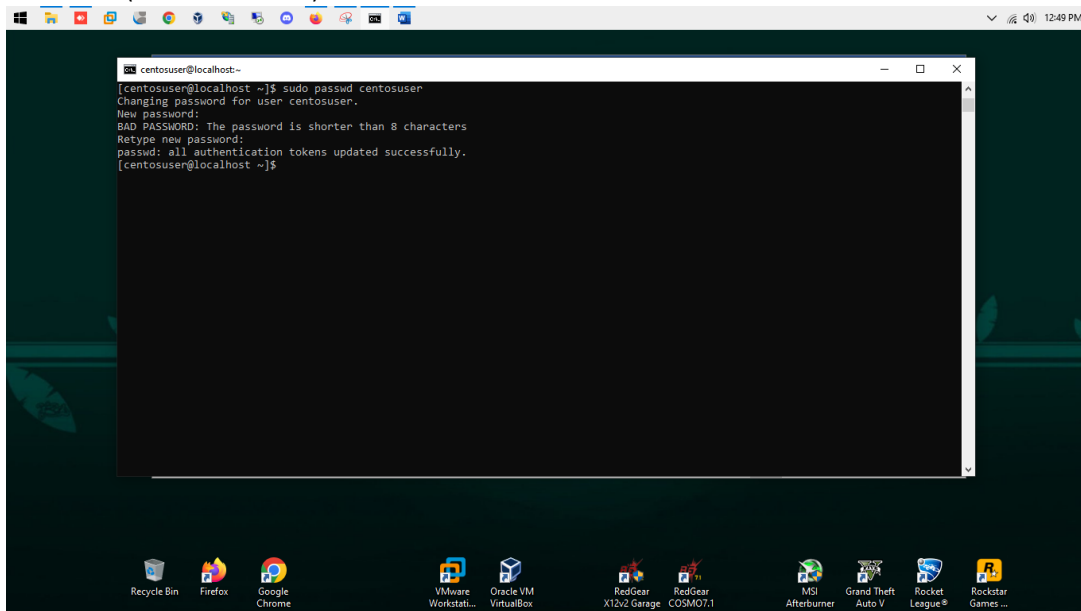


## 2. Assignment- 02

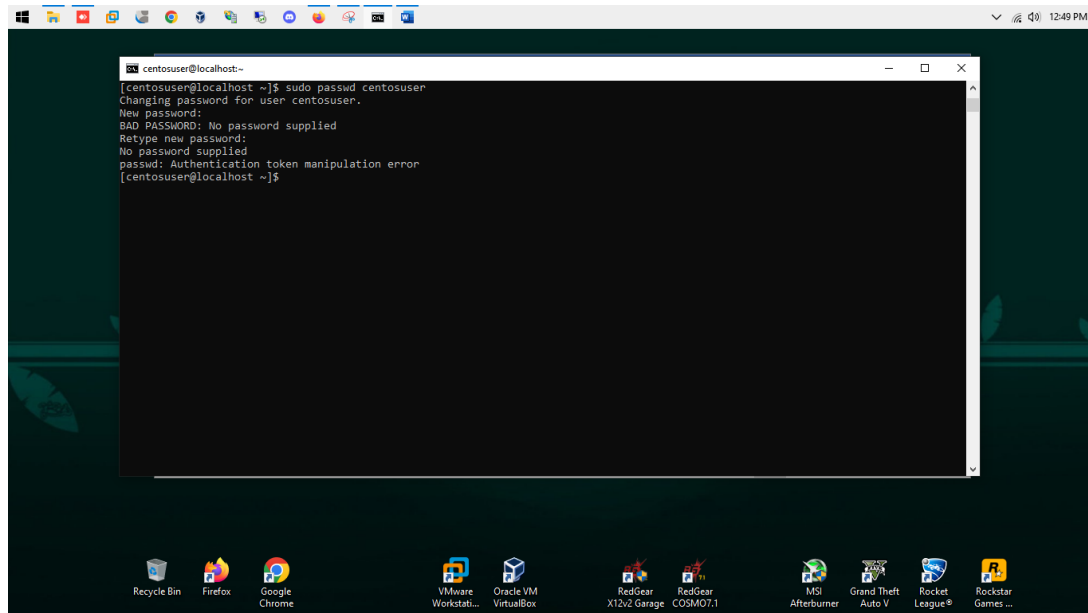
- Changing password to lneuR0n#42 has been successfully updated. (Password has been changed)



- Changing password to 1234 or abcd is successfully updated but throwing alert that password is shorter than 8 characters (BAD PASSWORD)



- Password changing to no password or empty password throwing an error that Authentication token manipulation error.
- Means empty password cannot be applied to any user.



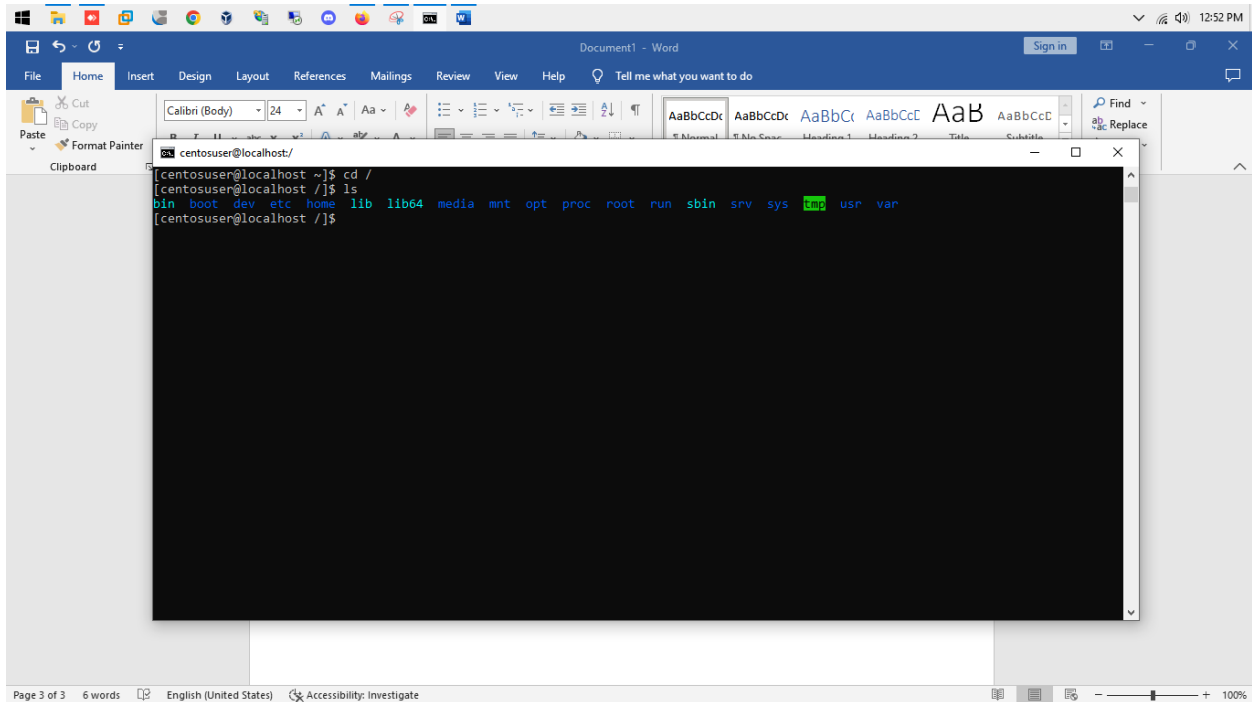
The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various application icons. The desktop background is dark green with a subtle pattern. In the center, a terminal window titled 'centosuser@localhost:~' is open. The terminal displays the following text:

```
[centosuser@localhost ~]$ sudo passwd centosuser
Changing password for user centosuser.
New password:
BAD PASSWORD: No password supplied
Retype new password:
No password supplied
passwd: Authentication token manipulation error
[centosuser@localhost ~]$
```

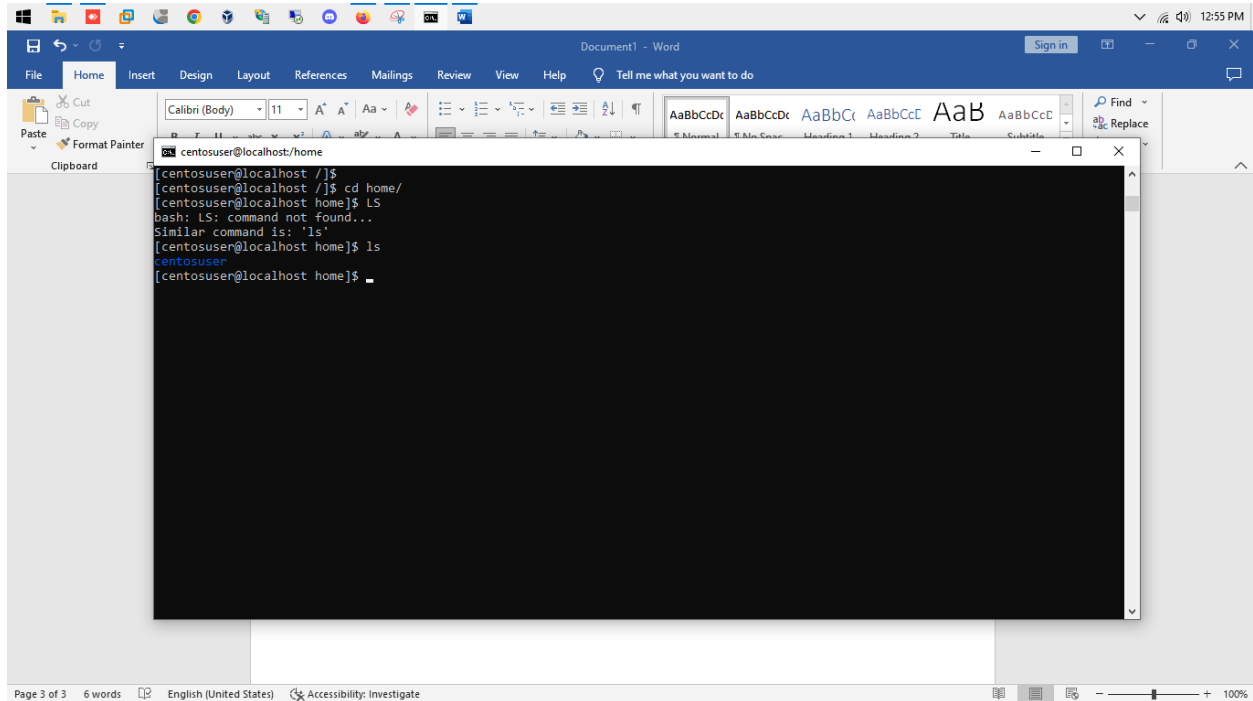
Below the terminal window, the desktop taskbar contains several icons: Recycle Bin, Firefox, Google Chrome, VMware Workstation, Oracle VM VirtualBox, RedGear X12v2 Garage, RedGear COSMOT.1, MSI Afterburner, Grand Theft Auto V, Rocket League, and Rockstar Games Launcher.

### 3. Assignment- 03

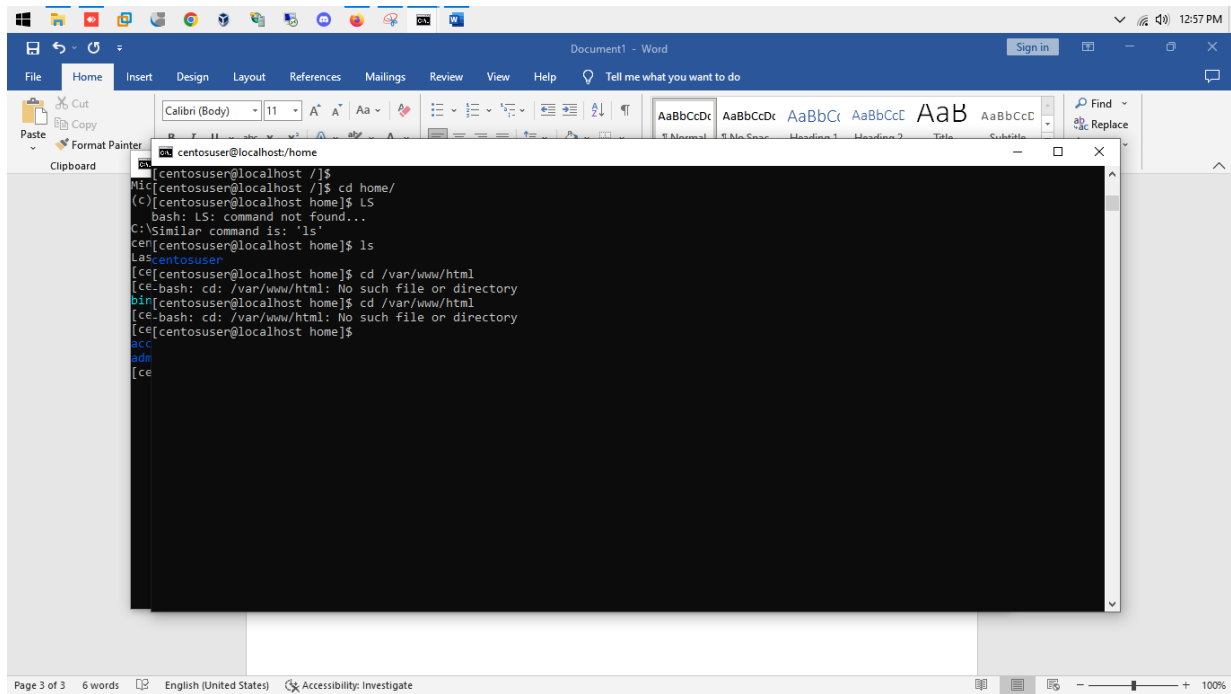
- Cd / then ls
- Cd / means changing directory path to root directory and ls means listing the directory content
- This shows all the directory in root (home, var, etc, run, etc)



- Cd /home then ls
- Changing the Director to home & showing all the directory and files in the home director
- Home directory showing – all the directory of user (currently we having only one user named centosuser)



- `cd /var/www/html` → changing the directory to html folder but it throws an error that (No such file or directory), because the directory named `www/html` is not present in the `/var` directory.

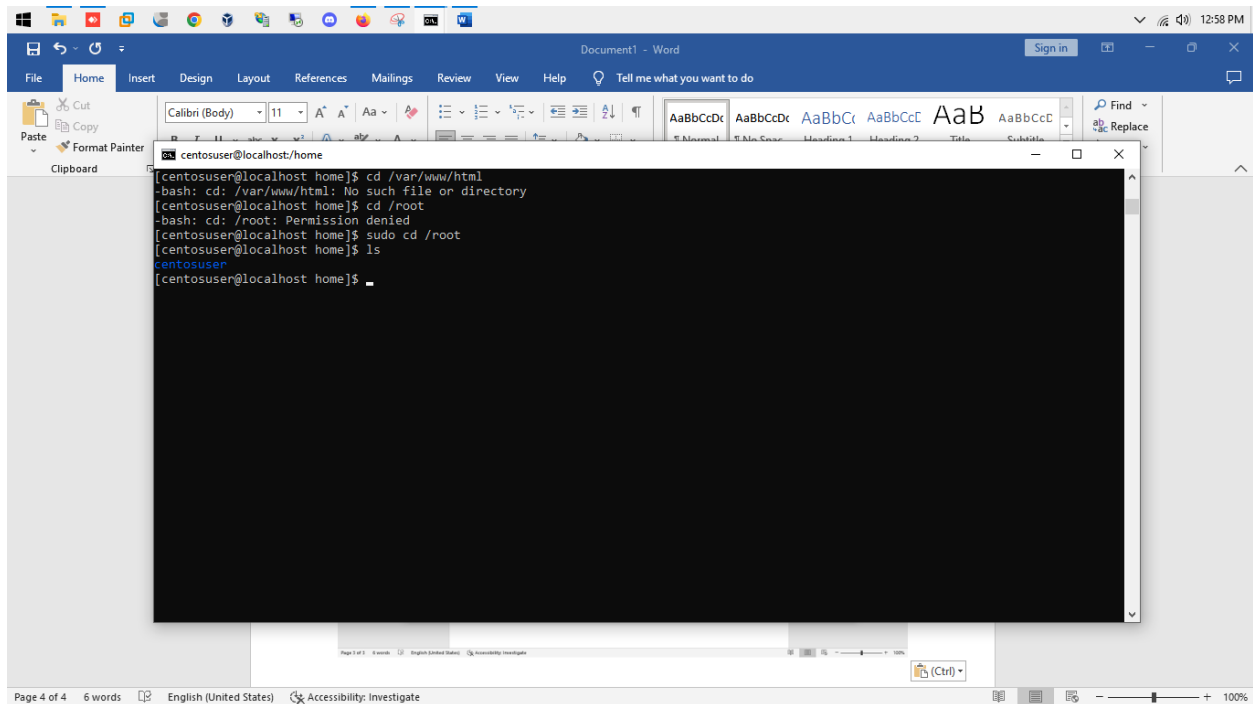


```
centosuser@localhost/home
[centosuser@localhost ~]$
[centosuser@localhost ~]$ cd home/
[centosuser@localhost home]$ ls
bash: ls: command not found...
[centosuser@localhost home]$ ls
ls: cannot access 'ls': No such file or directory
[centosuser@localhost home]$ cd /var/www/html
[centosuser@localhost home]$ cd /var/www/html
[centosuser@localhost home]$
```

The screenshot shows a Windows desktop environment. In the background, a Microsoft Word document titled "Document1 - Word" is open, displaying a ribbon with tabs like File, Home, Insert, Design, Layout, References, Mailings, Review, View, and Help. The ribbon also includes various font and paragraph formatting options. In the foreground, a terminal window is open, showing a user attempting to navigate to the `/var/www/html` directory. The terminal output shows the user's commands and the resulting errors: `bash: ls: command not found...` and `[centosuser@localhost home]$ cd /var/www/html` followed by `[centosuser@localhost home]$`. The terminal window has a title bar that reads "centosuser@localhost/home".



- Cd /root – changing the directory to root folder but other user don't have permission to get into root folder because it is protected
- So I used sudo cd /root to get into root folder and provide the root password
- ls → is used to show the current directory files and folders where only centosuser user is present which is basically and admin user with administrative privilege.

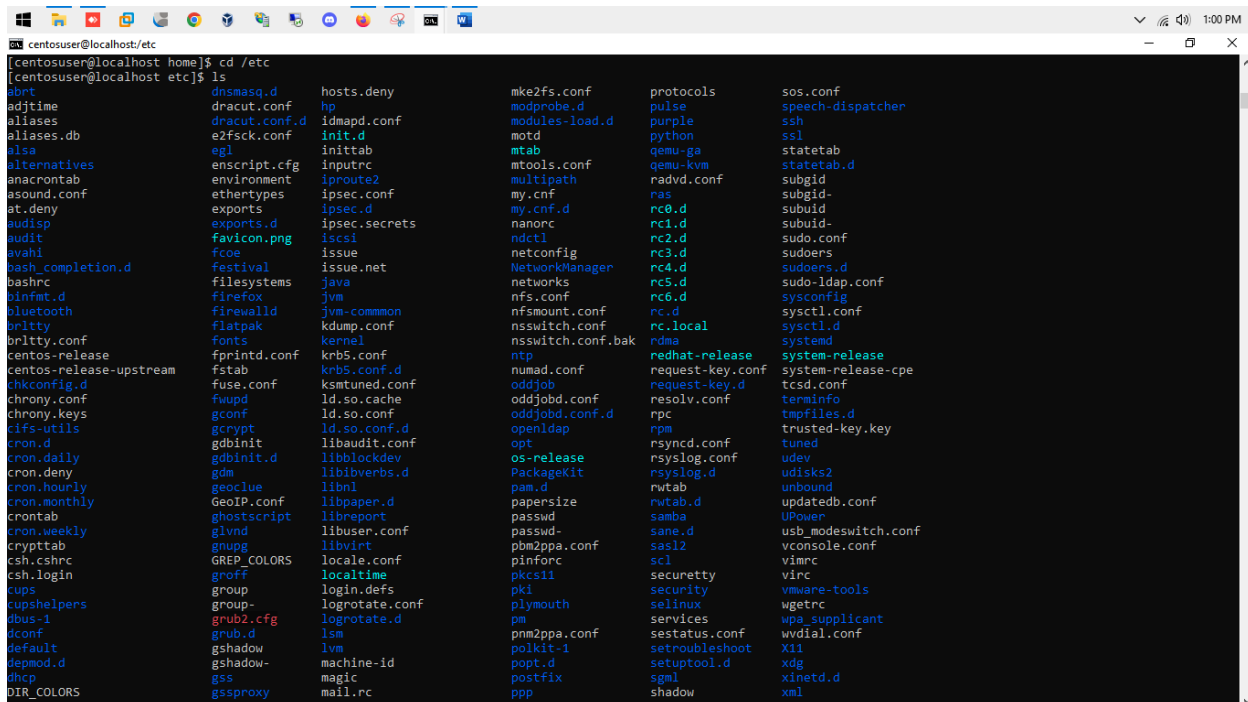


```
[centosuser@localhost home]$ cd /var/www/html
-bash: cd: /var/www/html: No such file or directory
[centosuser@localhost home]$ cd /root
-bash: cd: /root: Permission denied
[centosuser@localhost home]$ sudo cd /root
[centosuser@localhost home]$ ls
centosuser
[centosuser@localhost home]$
```

Page 4 of 4 6 words English (United States) Accessibility: Investigate 100%

## 4. Assignment- 04

- `cd /etc` – changing the directory to etc folder
- `/etc` directory is user to store the configuration files of Linux operating system
- `Ls` – is used to list the files and folders in directory
- There we got all the configuration files ( e.g.-network, ssh, cron, sudoers )



```
centosuser@localhost:~$ cd /etc
centosuser@localhost:~$ ls
abrt                               dnsmasq.d          hosts.deny          mke2fs.conf         protocols           sos.conf
adjtime                           dracut.conf         hp                  modprobe.d           pulse              speech-dispatcher
aliases                           dracut.conf.d       idmapd.conf         modules-load.d       purple             ssh
aliases.db                        e2fsck.conf         init.d              motd                  python             statetab
alsa                              egr                inittab             mtlib                 qemu-ga            statetab.d
alternatives                      enscript.cfg        inputrc             multitools.conf      qemu-kvm           subgid
anacrontab                        environment         iproute2            multipath             radvd.conf         subuid
asound.conf                       ethertypes          ipsec.conf          my.cnf               ras                subuid-
at.deny                           exports             ipsec.secrets       my.cnf.d             rc0.d              subuid-
audisp                            exports.d           ipsec.secrets       nanorc               rc1.d              subuid-
audit                             favicon.png          iscsi               netconfig            rc2.d              sudo.conf
avahi                             fcoe               issue               NetworkManager      rc3.d              sudoers
bash_completion.d                festival           issue.net           networks             rc4.d              sudoers.d
bashrc                           filesystems         java               nfs.conf             rc5.d              sudo-ldap.conf
binfmt.d                         firefox            jvm                nfs.conf.d           rc6.d              sysconfig
bluetooth                       flatpak            kvm-common          nfs.mount.conf       rc.local           sysctl.conf
brltty                           fonts              kernel              nsswitch.conf        rc.local           sysctl.d
brltty.conf                      fprintd.conf       krb5.conf           nsswitch.conf.bak   rdma               systemd
centos-release                   fprintd.conf       krb5.conf.d         ntp                  redhat-release     system-release
chkconfig.d                     fuse.conf          ksmtuned.conf       oddjob               request-key.conf   system-release-cpe
chrony.conf                     fwupd             ld.so.cache         oddjobd.conf         request-key.d      tcsh.conf
chrony.keys                     gcrypt            ld.so.conf          oddjobd.conf.d       resolv.conf        terminfo
cifs-utils                      gcrpypt           ld.so.conf.d        openldap             rpc                tmpfiles.d
cron.d                          gdbinit           libaudit.conf       opt                  rpm               trusted-key.key
cron.daily                      gdbinit.d         libblockdev         os-release           rsyncd.conf        tuned
cron.deny                      gdm               libibverbs.d       PackageKit           rsyslog.conf       udev
cron.hourly                    geoclue           libnl               pam.d                rsyslog.d          udisks2
cron.monthly                   GeoIP.conf        libpaper.d          pamp                 rwtab              unbound
crontab                         ghostscript       libreport           passw                rwtab.d            updatedb.conf
cron.weekly                    glvnd             libuser.conf        passwd              samba              UPower
crypttab                       gnupg             libvirt             pbm2ppa.conf        sane.d             usb_modeswitch.conf
csh.cshrc                      GREP_COLORS       locale.conf         pinforc              sasl2              vconsole.conf
csh.login                      groff             localtime           pkcs11               scl                 vimrc
cups                            group             login.defs          plink                security            vmware-tools
cupshelpers                    group-            logrotate.conf      plymouth             selinux             wgetrc
dbus-1                          grub2.cfg         logrotate.d         pm                   services            wpa_supplicant
dcnf                            grub.d            lsm                 pnm2ppa.conf        sestatus.conf      wvdial.conf
default                        gshadow           lvm                 polkit-1             setroubleshoot     X11
depmod.d                      gshadow-          machine-id          popt.d              setupool.d         xdg
dhcp                           gss               magic               postfix              sgml               xinetd.d
DIR_COLORS                    gssproxy          mail.rc              ppp                  shadow              xml
```

- `Ls -al` -> this command is user to list the files and folders in long listing manner, where we can see file/folder permission, group, ownership, size, creation data/time etc.

```

centosuser@localhost/etc
drwxr-xr-x. 2 root root    19 Oct 12 07:21 ssl
-rw-r--r--. 1 root root   212 Oct 13 2020 statetab
drwxr-xr-x. 2 root root    6 Oct 13 2020 statetab.d
-rw-r--r--. 1 root root   24 Oct 16 12:41 subgid
-rw-r--r--. 1 root root    0 Apr 1 2020 subgid-
-rw-r--r--. 1 root root   24 Oct 16 12:41 subuid
-rw-r--r--. 1 root root    0 Apr 1 2020 subuid-
-rw-r--r--. 1 root root  1786 Sep 30 2020 sudo.conf
-rw-r--r--. 1 root root  4328 Sep 30 2020 sudoers
drwxr-xr-x. 2 root root    6 Sep 30 2020 sudoers.d
-rw-r--r--. 1 root root  3181 Sep 30 2020 sudo-ldap.conf
drwxr-xr-x. 6 root root  4096 Oct 12 08:00 sysconfig
-rw-r--r--. 1 root root   449 Oct 13 2020 sysctl.conf
drwxr-xr-x. 2 root root   28 Oct 12 07:27 sysctl.d
drwxr-xr-x. 4 root root  151 Oct 12 07:27 systemd
lrwxrwxrwx. 1 root root   14 Oct 12 07:19 system-release -> centos-release
-rw-r--r--. 1 root root   23 Oct 23 2020 system-release-cpe
-rw-r--r--. 1 tss tss    7046 Aug 3 2017 tcstd.conf
drwxr-xr-x. 2 root root    6 Sep 7 2017 terminfo
drwxr-xr-x. 2 root root    6 Oct 1 2020 tmpfiles.d
-rw-r--r--. 1 root root   750 Oct 13 2020 trusted-key.key
drwxr-xr-x. 3 root root   109 Oct 12 07:35 tuned
drwxr-xr-x. 3 root root    54 Oct 12 08:02 udev
drwxr-xr-x. 2 root root    26 Oct 12 07:32 udisks2
drwxr-xr-x. 2 root root    68 Oct 12 07:30 unbound
-rw-r--r--. 1 root root   163 Oct 12 07:19 updatedb
-rw-r--r--. 1 root root   557 Apr 11 2018 updatedb.conf
drwxr-xr-x. 2 root root    25 Oct 12 07:30 uPower
-rw-r--r--. 1 root root  1523 Apr 11 2018 usb_modeswitch.conf
-rw-r--r--. 1 root root    41 Oct 12 07:57 vconsole.conf
-rw-r--r--. 1 root root  1982 Oct 13 2020 vimrc
-rw-r--r--. 1 root root  1982 Oct 13 2020 virc
drwxr-xr-x. 4 root root   208 Oct 12 07:28 vmware-tools
-rw-r--r--. 1 root root  4479 May 16 2019 wgetrc
drwxr-xr-x. 2 root root    33 Oct 12 07:28 wpa_supplicant
-rw-r--r--. 1 root root    0 Jun 10 2014 wvdial.conf
drwxr-xr-x. 6 root root   103 Oct 12 07:27 x11
drwxr-xr-x. 6 root root   116 Oct 12 07:29 xdg
drwxr-xr-x. 2 root root    6 Apr 11 2018 xinetd.d
drwxr-xr-x. 2 root root    21 Oct 12 07:22 xml
drwxr-xr-x. 6 root root   100 Oct 12 07:26 yum
-rw-r--r--. 1 root root   970 Oct 1 2020 yum.conf
drwxr-xr-x. 2 root root   220 Oct 1 2020 yum.repos.d
[centosuser@localhost etc]$

```

- `Ls -l` -> this command is used to show the inode number of all files and folder in current directory.

```

centosuser@localhost/etc
163188 bash_completion.d 2181496 fwupd 17321797 libuser.conf 205039 popt.d 34712208 ssh
16778347 bashrc 34570162 gconf 51119943 libvirt 17904330 postfix 554451 ssl
50917642 binfmt.d 205096 gccrypt 16777293 locale.conf 34582558 ppp 17370973 statetab
50906401 bluetooth 17205617 gdbinit 16777287 localtime 188383 prelink.conf.d 1302040 statetab.d
17431645 brltty 17205618 gdbinit.d 17349582 login.defs 16778362 printcap 18023293 subgid
17431646 brltty.conf 51473531 gdm 17320329 logrotate.conf 16778363 profile 18023292 subgid
16777320 centos-release 51376068 geoclue 1152426 logrotate.d 16778364 protocols 18023290 subuid
16777321 centos-release-upstream 17322463 GeoIP.conf 1421543 lsm 16778364 protocols 18023290 subuid
50361303 chkconfig.d 17634768 ghostscript 34675333 lvm 34567182 pulse 17611549 sudo.conf
17498230 chrony.conf 16797814 glvnd 17337845 machine-id 2256133 purple 17611550 sudoers
17498232 chrony.keys 34538412 gnupg 16904021 magic 17148019 python 3086402 sudoers.d
51840637 cifs-utils 16876645 GREP_COLORS 17322449 mail.rc 3060139 qemu-ga 17611548 sudo-ldap.conf
34582540 cron.d 50386262 groff 17463466 makedumpfile.conf.sample 51437745 qemu-kvm 50332834 sysconfig
34520129 cron.daily 18060354 group 17611676 man_db.conf 17500610 radvd.conf 17379375 sysctl.conf
17370344 cron.deny 17249660 group- 34519347 maven 51817554 ras 17334564 sysctl.d
34582538 cron.hourly 17463475 grub2.cfg 3055462 mclog 16811350 rc0.d 34560074 systemd
50954244 cron.monthly 16778343 grub.d 17205600 nke2fs.conf 16811351 rc1.d 16777326 system-release
17379337 crontab 18060357 gshadow 17216241 modprobe.d 16811352 rc2.d 16777327 system-release-cpe
1382014 cron.weekly 17349658 gshadow- 1319496 modules-load.d 16811353 rc3.d 17500609 tcsh.conf
16777283 crypttab 50723443 gss 16778360 motd 16811354 rc4.d 180315 terminfo
16778348 csh.cshrc 17491076 gssproxy 16777284 ntab 16811355 rc5.d 17334565 tmpfiles.d
16778349 csh.login 16778355 host.conf 17026521 mttools.conf 16811356 rc6.d 17611547 trusted-key.key
51512816 cups 16777294 hostname 17432082 multipath 205051 rc.d 35268788 tuned
34893777 cupshelpers 16778356 hosts 17322480 my.cnf 17334563 rc.local 34560081 udev
1319494 dbus-1 16778357 hosts.allow 17322481 my.cnf.d 1450431 rdma 2363671 udisks2
50044258 dconf 16778358 hosts.deny 17023904 nanorc 16777325 redhat-release 34784612 unbound
33827852 default 17500613 hp 34712324 ncttl 17022713 request-key.conf 17900606 updatedb.conf
1310450 depmod.d 17222455 idmapd.conf 17205630 netconfig 33997016 request-key.d 34795334 UPower
17461084 dhcpc 16811344 init.d 34582546 NetworkManager 18023247 resolv.conf 17488374 usb_modeswitch.conf
17147945 DIR_COLORS 17379367 inittab 17379368 networks 16811312 rpc 16777286 vconsole.conf
17147946 DIR_COLORS.256color 16778359 inputrc 17634226 nfs.conf 33677689 rpm 17031538 vimrc
17147947 DIR_COLORS.lightbgcolor 16929522 iproute2 17634228 nfsmount.conf 17500619 rsyncd.conf 17022724 virc
17535241 dleyna-server-service.conf 17500395 ipsec.conf 17337852 nsswitch.conf 17611717 rsyslog.conf 17464037 vmware-tools
17485017 dnsmasq.conf 51117086 ipsec.d 16811311 nsswitch.conf.bak 34560070 rsyslog.d 17611504 wgetrc
1703230 dnsmasq.d 17500396 ipsec.secrets 51825117 ntp 17379372 rwtab 1457863 wpa_supplicant
17351055 dracut.conf 1382020 iscsi 17464345 numad.conf 50806989 rwtab.d 17875246 wvdial.conf
34559824 dracut.conf.d 16777322 issue 51093514 oddjob 50954273 samba 16778371 x11
17205587 e2fsck.conf 16777323 issue.net 17409089 oddjobd.conf 1471318 same.d 163110 xdg
1450416 egl 17283850 java 1702322 oddjobd.conf.d 966299 sac12 33737902 xinetd.d
17611507 encrypt.cfg 1131806 jvm 17321790 openldap 17931612 scl 33963871 xml
16778350 environment 17283853 jvm-common 16778372 opt 89 yum 16778365 securetty
17444225 ethertypes 17463465 kdump.conf 16777324 os-release 34421290 security 17320704 yum.conf
16778351 exports 51840634 kernel 1381924 PackageKit 17323901 selinux 50331734 yum.repos.d
[centosuser@localhost etc]$

```

- `ls --help` -> command is user to show the manual page of this command where we learn more about this command & other options used with this command.

```

centosuser@localhost/etc
FORMAT is interpreted like in 'date'; if FORMAT
is FORMAT1<newline>FORMAT2, then FORMAT1 applies
to non-recent files and FORMAT2 to recent files;
if STYLE is prefixed with 'posix-', STYLE
takes effect only outside the POSIX locale
-t          sort by modification time, newest first
-T, --tabsize=COLS  assume tab stops at each COLS instead of 8
-u          with -lt: sort by, and show, access time;
              with -l: show access time and sort by name;
              otherwise: sort by access time
-U          do not sort; list entries in directory order
-v          natural sort of (version) numbers within text
-W, --width=COLS  assume screen width instead of current value
-x          list entries by lines instead of by columns
-X          sort alphabetically by entry extension
-1          list one file per line

SELinux options:

--lcontext      Display security context.  Enable -l. Lines
                will probably be too wide for most displays.
-Z, --context    Display security context so it fits on most
                displays.  Displays only mode, user, group,
                security context and file name.
--scontext      Display only security context and file name.
--help          display this help and exit
--version       output version information and exit

SIZE is an integer and optional unit (example: 10M is 10*1024*1024).  Units
are K, M, G, T, P, E, Z, Y (powers of 1024) or KB, MB, ... (powers of 1000).

Using color to distinguish file types is disabled both by default and
with --color=never.  With --color=auto, ls emits color codes only when
standard output is connected to a terminal.  The LS_COLORS environment
variable can change the settings.  Use the dircolors command to set it.

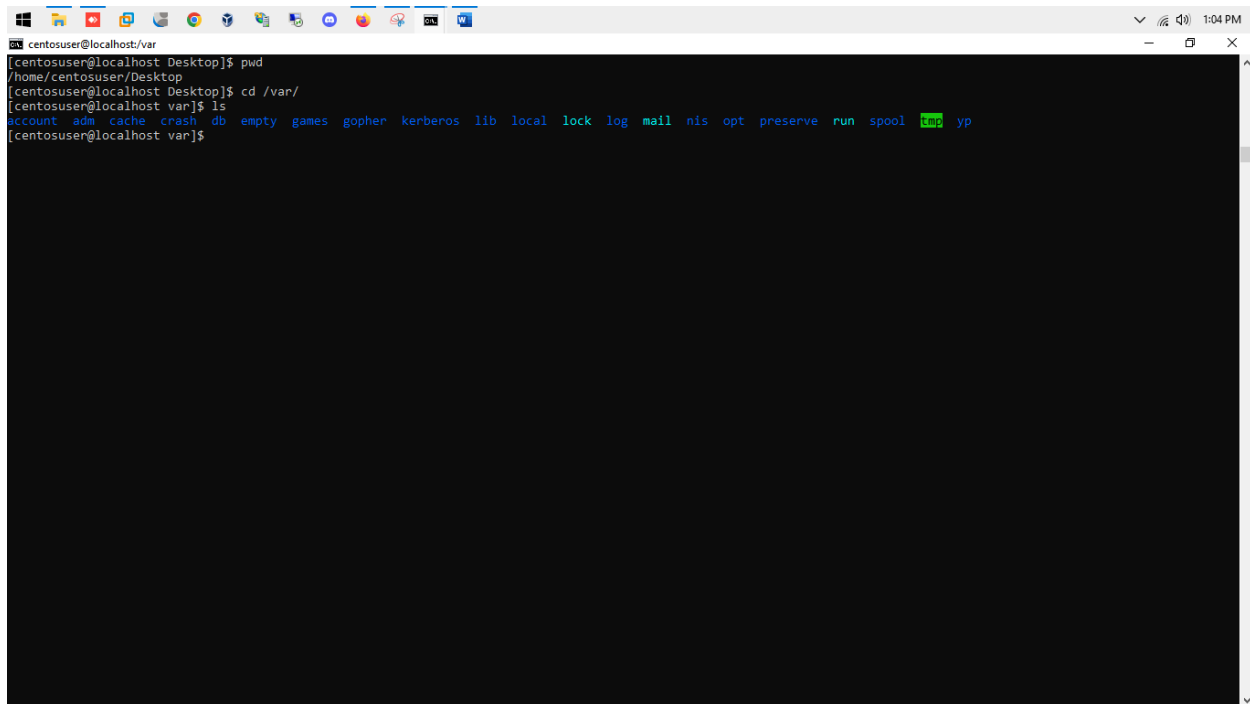
Exit status:
 0 if OK,
 1 if minor problems (e.g., cannot access subdirectory),
 2 if serious trouble (e.g., cannot access command-line argument).

GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'ls invocation'
[centosuser@localhost etc]$

```

## 5. Assignment- 05

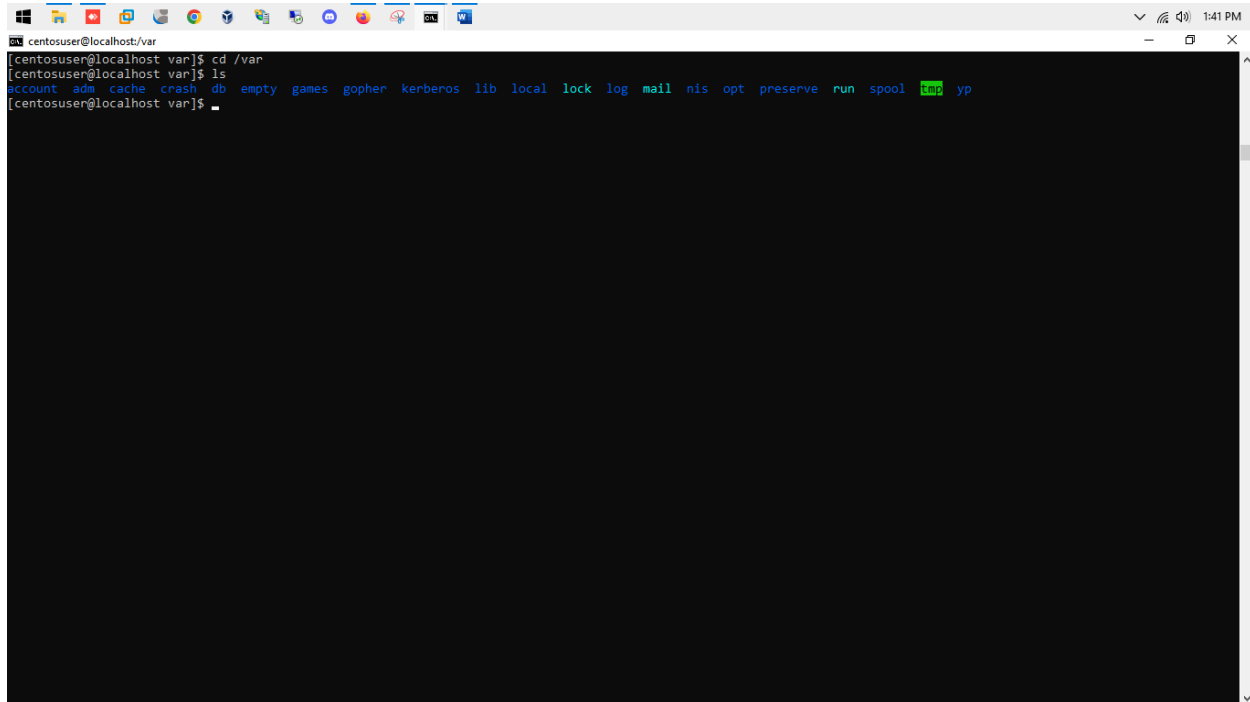
- Pwd – this command shows the present working directory inside the terminal.
- As shown in screenshot - /home/centosuser/Desktop – shows that my present working directory is Desktop inside user centosuser



The screenshot shows a terminal window with a Windows taskbar at the top. The terminal output is as follows:

```
centosuser@localhost/var
[centosuser@localhost Desktop]$ pwd
/home/centosuser/Desktop
[centosuser@localhost Desktop]$ cd /var/
[centosuser@localhost var]$ ls
account  adm  cache  crash  db  empty  games  gopher  kerberos  lib  local  lock  log  mail  nis  opt  preserve  run  spool  yp
[centosuser@localhost var]$
```

- Cd /var then ls → changing the directory to var folder where we store all the variables.
- Some of the directory of var are- www, run, local, mail etc.
- AS /var/www/html directory is user for hosting the webpages.



```
centosuser@localhost/var
[centosuser@localhost var]$ cd /var
[centosuser@localhost var]$ ls
account  adm  cache  crash  db  empty  games  gopher  kerberos  lib  local  lock  log  mail  nis  opt  preserve  run  spool  tmp  yp
[centosuser@localhost var]$ _
```

The image shows a terminal window with a Windows taskbar at the top. The terminal title is 'centosuser@localhost/var'. The user enters 'cd /var' and then 'ls', which lists the contents of the /var directory. The output shows various subdirectories including account, adm, cache, crash, db, empty, games, gopher, kerberos, lib, local, lock, log, mail, nis, opt, preserve, run, spool, tmp, and yp. The prompt returns to the user's shell.