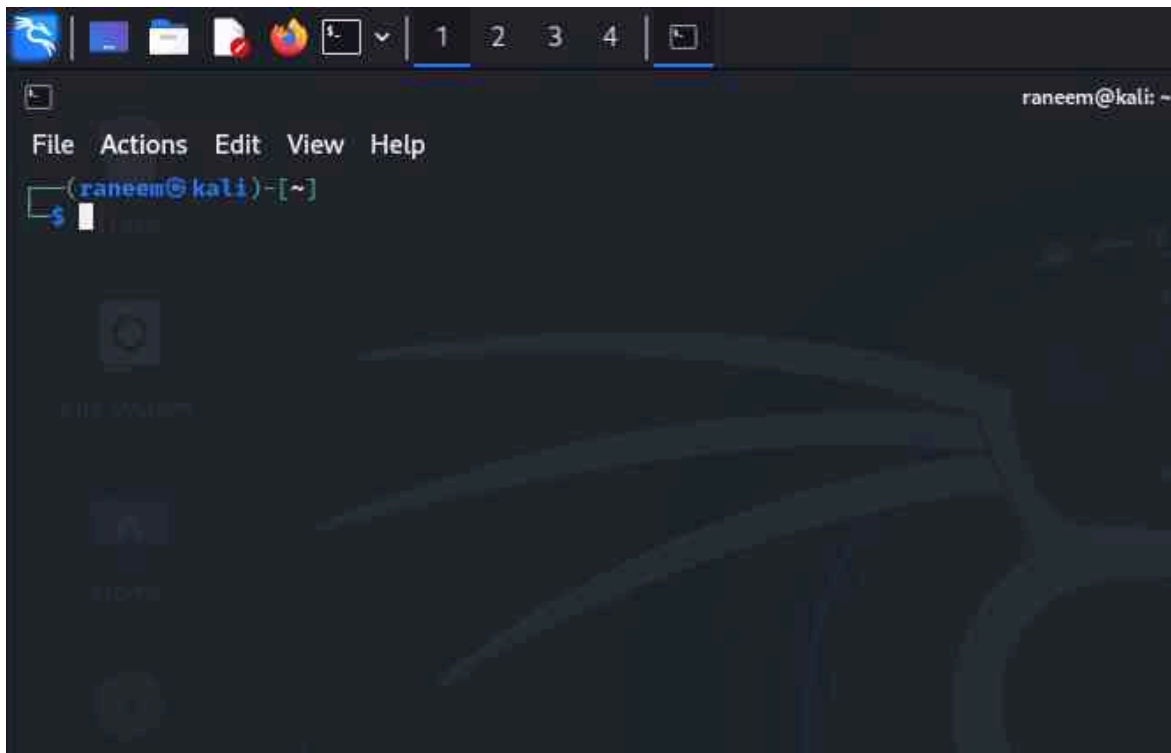
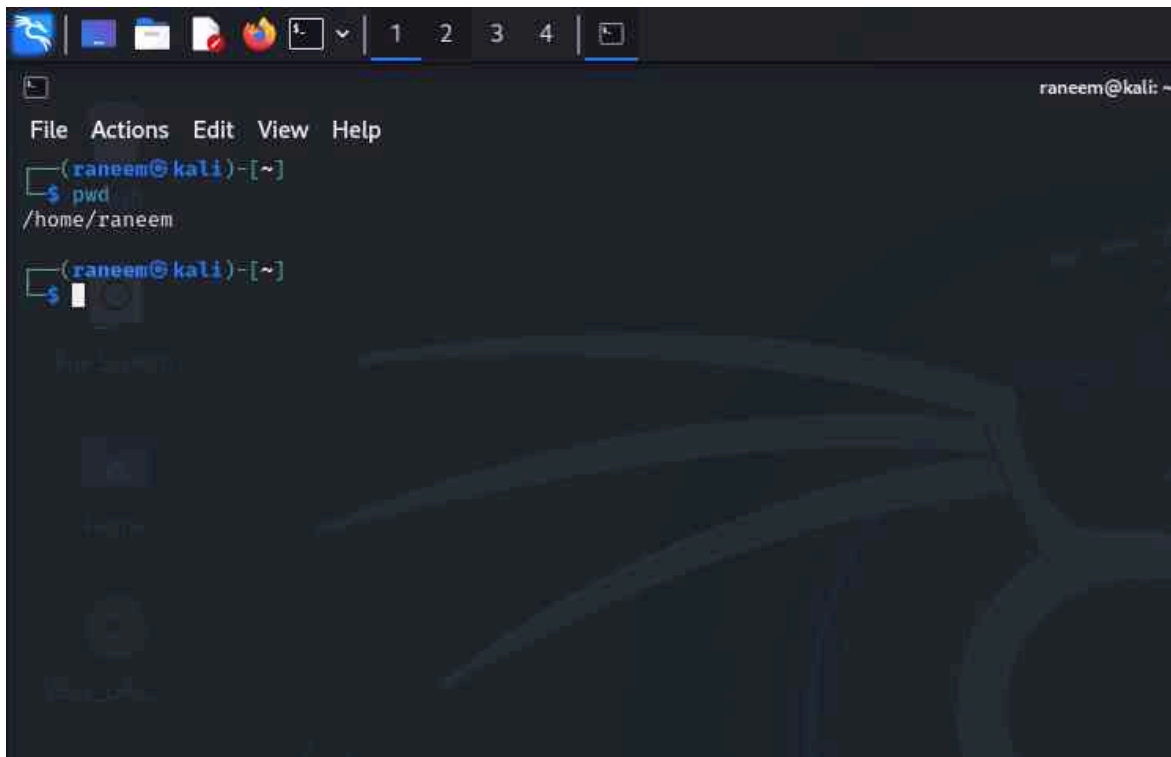


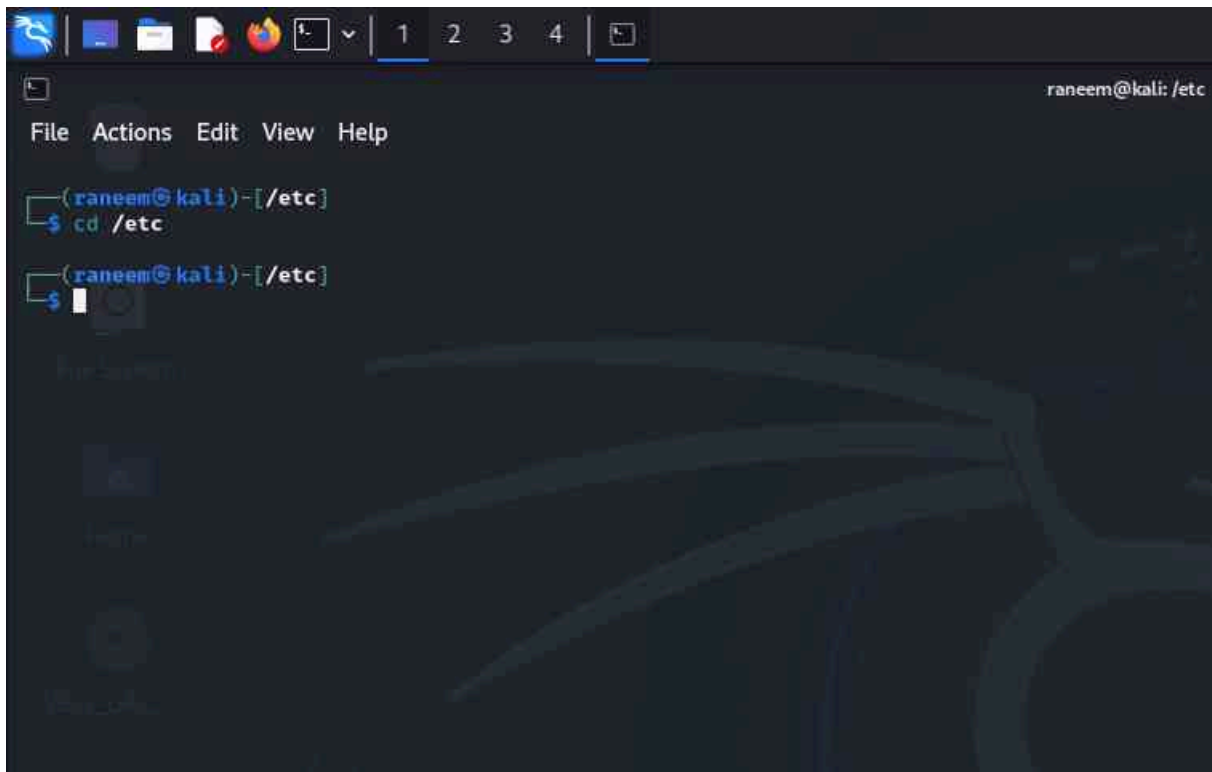
**Step 1:** Open a terminal window



**Step 2:** Display your current working directory



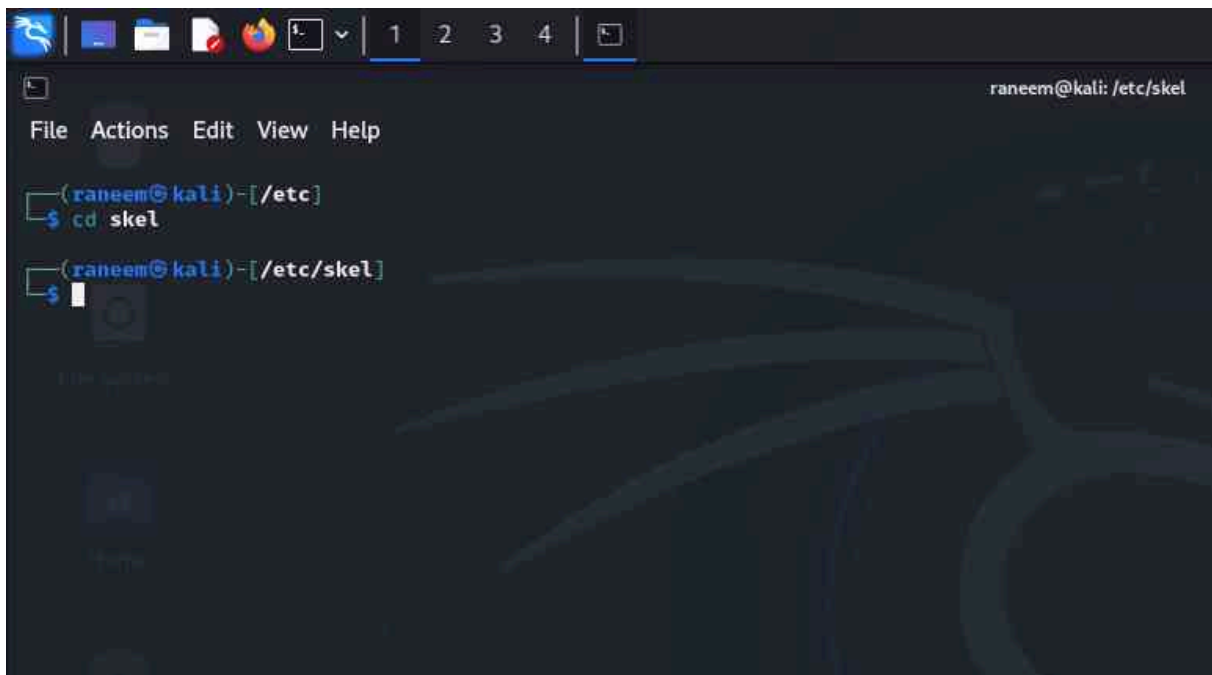
**Step 3:** Using an absolute pathname, switch to the /etc directory



A terminal window with a dark background and a light blue cursor. The window title is "raneem@kali: /etc". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the prompt "(raneem@kali)-[~/etc]" and the command "\$ cd /etc" being entered. The prompt then changes to "(raneem@kali)-[~/etc]" with a white cursor on the next line.

```
(raneem@kali)-[~/etc]
└─$ cd /etc
(raneem@kali)-[~/etc]
└─$
```

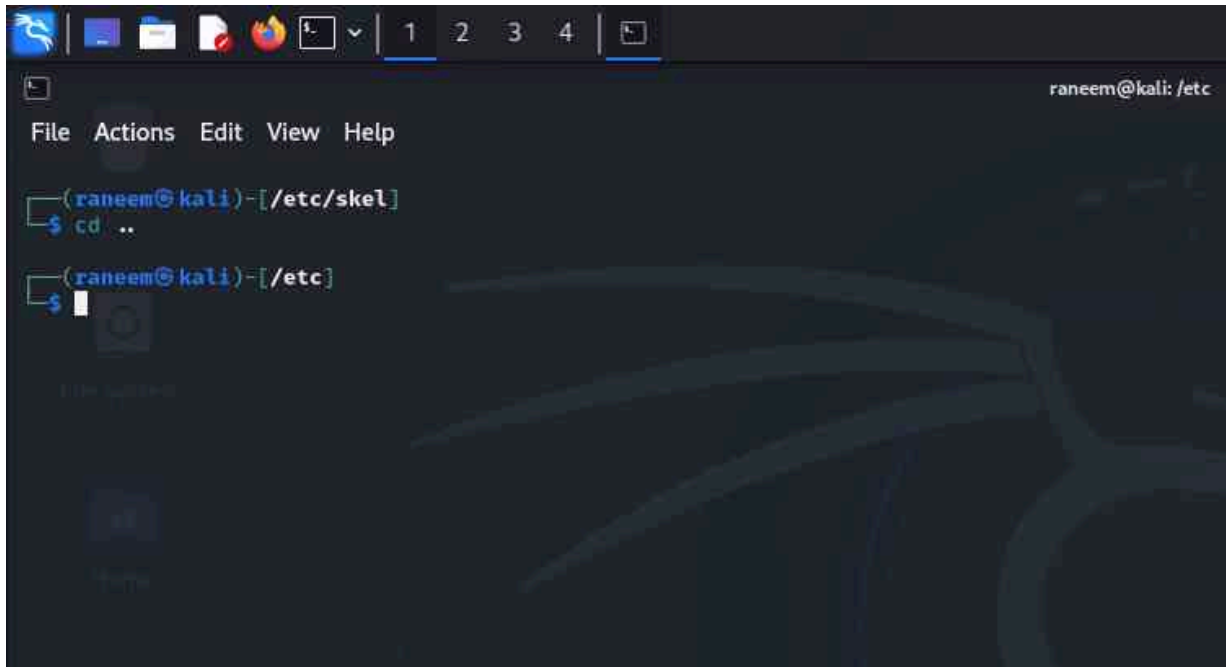
**Step 4:** Using a relative pathname, move to the /etc/skel directory



A terminal window with a dark background and a light blue cursor. The window title is "raneem@kali: /etc/skel". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the prompt "(raneem@kali)-[~/etc]" and the command "\$ cd skel" being entered. The prompt then changes to "(raneem@kali)-[~/etc/skel]" with a white cursor on the next line.

```
(raneem@kali)-[~/etc]
└─$ cd skel
(raneem@kali)-[~/etc/skel]
└─$
```

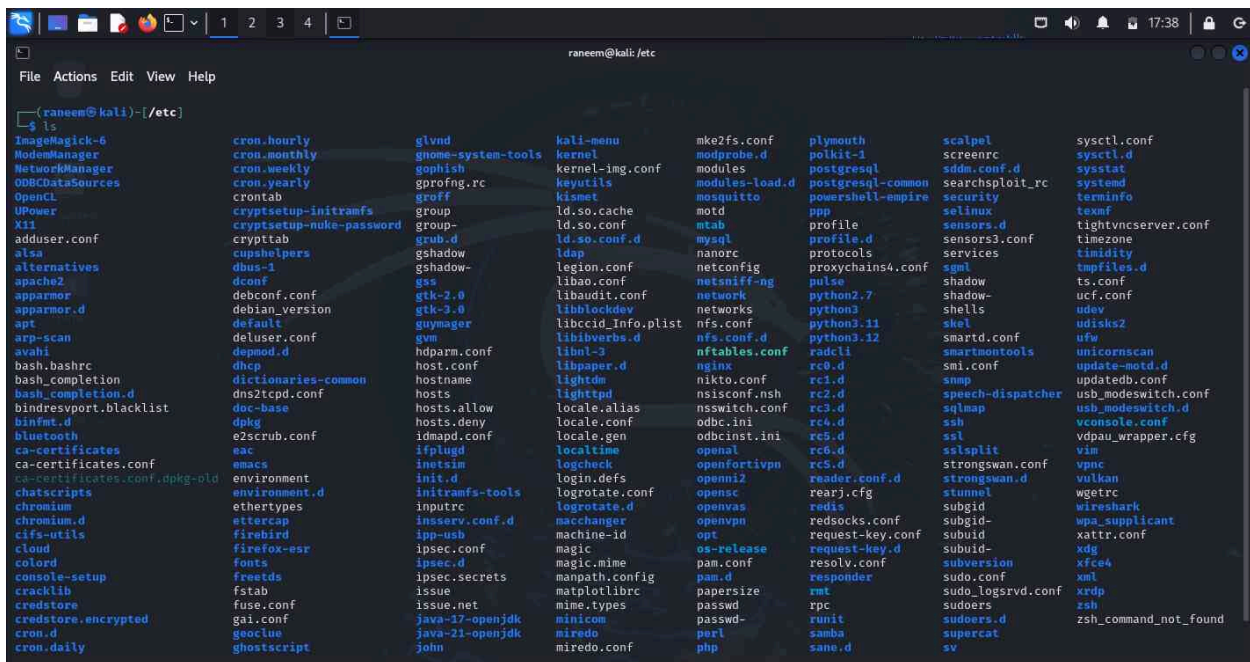
## Step 5: Using a relative pathname, move up one directory



```
(raneem@kali)=[/etc/skel]
$ cd ..

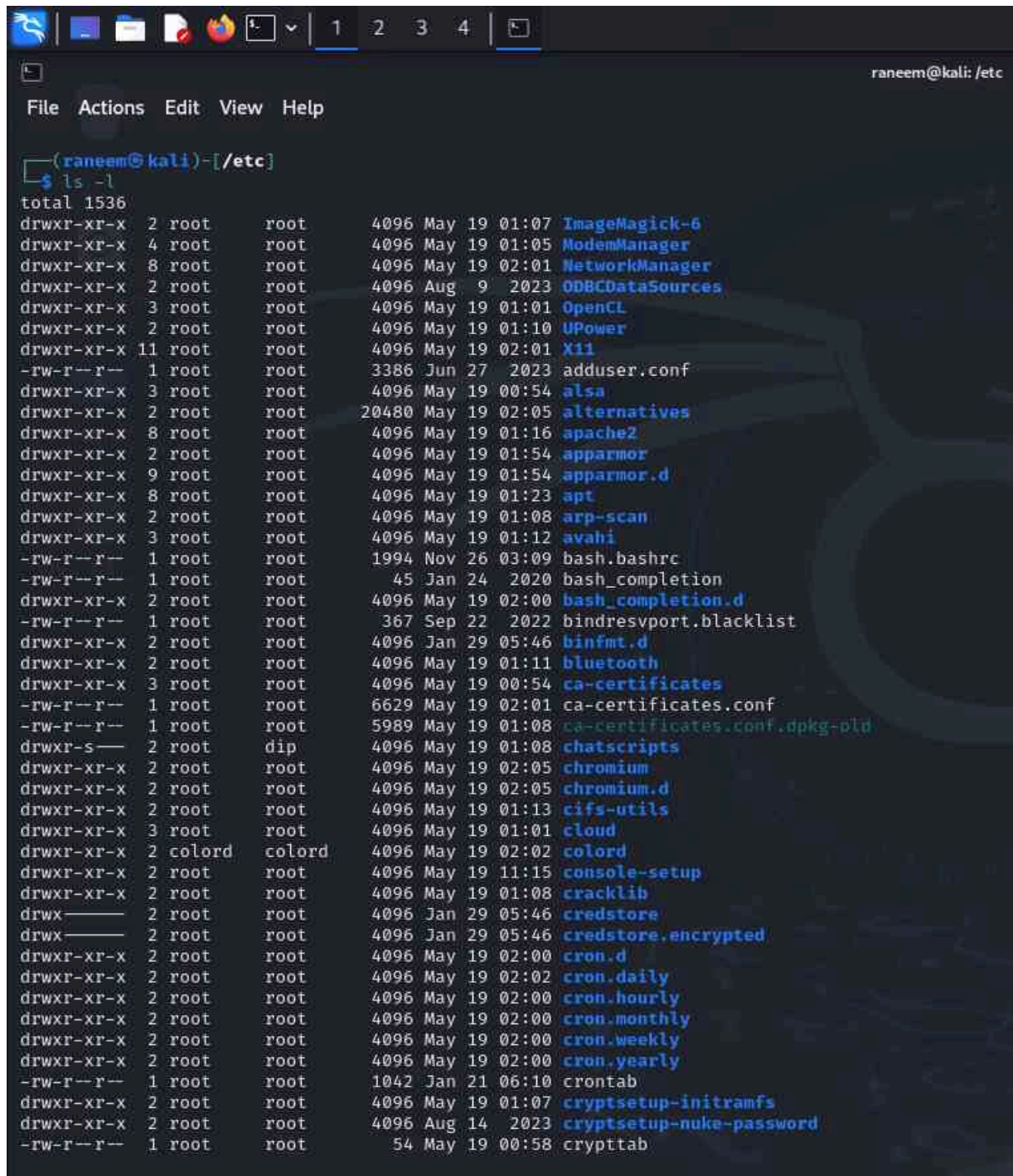
(raneem@kali)=[/etc]
```

## Step 6: List the files in the current directory



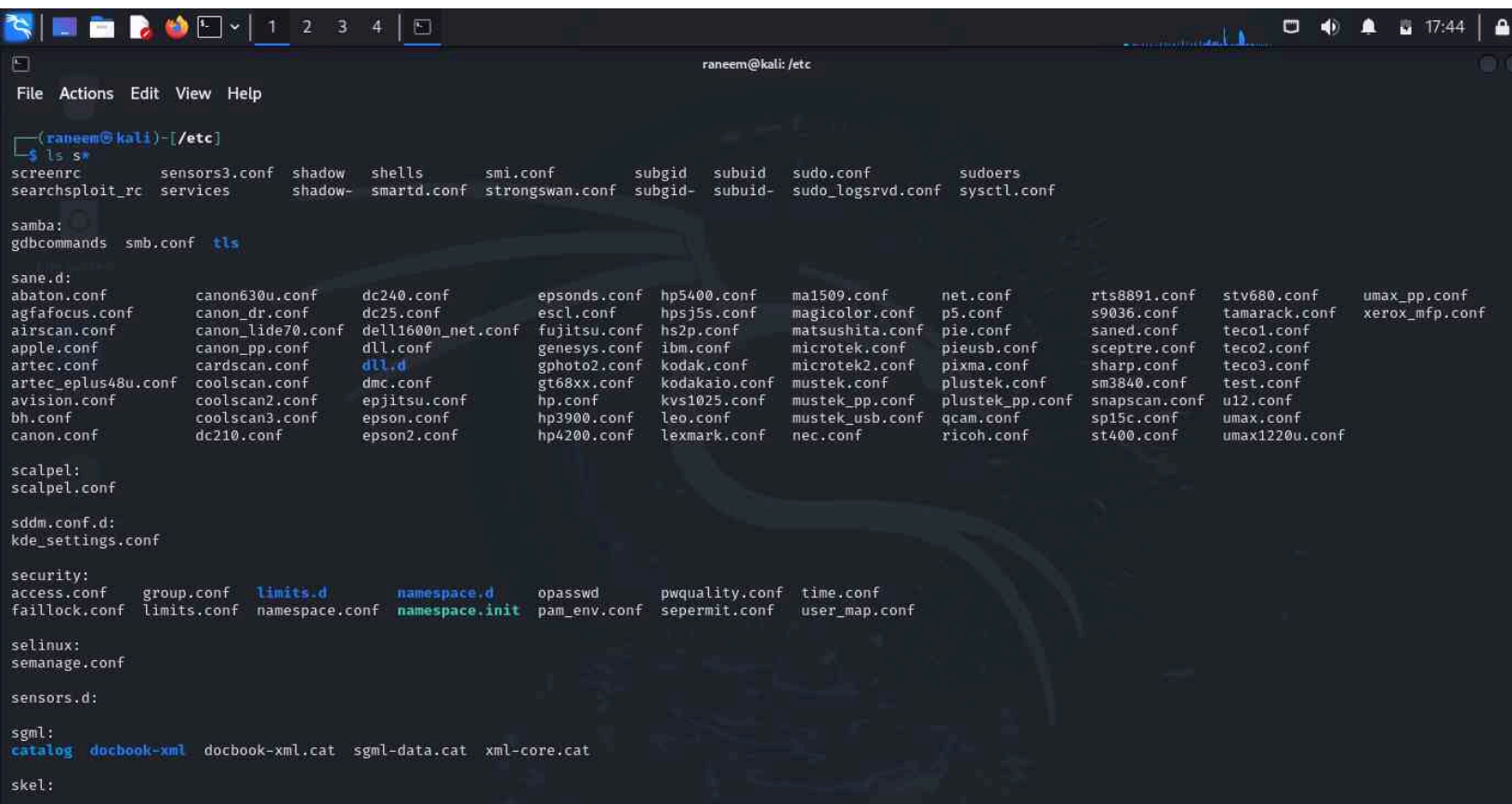
```
(raneem@kali)=[/etc]
$ ls
ImageMagick-6      cron.hourly      glvnd             kali-menu         mke2fs.conf      plymouth          scalpel           sysctl.conf
NetworkManager    cron.monthly     gnome-system-tools kernel-img.conf   modprobe.d       polkit-1          screenrc          sysctld.conf
NetworkManager    cron.weekly     gnomish           keyutils         modules-load.d   postgresql        sddm.conf.d      syslog.conf
ORBCDataSource    cron.yearly     gprofng.rc       kismet           mosquitto        postgresql-common searchsploit_rc  syslogd
OpenCL             crontab         group            ld.so.cache      mysql            powershell-empire security         terminfo
UPower            cryptsetup-initramfs cryptsetup-prepare ld.so.conf        mtab             ppp              selinux          tightvncserver.conf
X11              cryptsetup-prepare ld.so.conf.d     ld.so.conf       mtab             sensors.d        sensors3.conf   timezone
adduser.conf      cupshelpers     dconf            legion.conf      netconfig        shadow           services         timidity
alsa             dbus-1          dconf            libao.conf       netconf          shadow           sgml            tpmfiles.d
alternatives     debconf         debconf.conf     libaudit.conf   network          shadow           ssh             ts.conf
apache2          debconf         debian_version   libblockdev     nfs              shells           sudo            ucf.conf
apparmor         depmod           default          libccid         nfs.conf         python2.7        python3.11      uddev
apparmor.d       deluser.conf    dhcpcd.conf     libccid-Info.plist nfs.conf         python3.12      python3.12      udisks2
arp-scan         depmod.d        dhcp            libidn           nfs.conf         rc0.d            rc1.d           ufw
avahi            dhclient        dictionaries-common dnsmasq.conf    nftables.conf   rc0.d            rc2.d           smartmontools  unicornscan
bash.bashrc      dnsmasq        doc-base        dnsmasq.conf    nginx            rc0.d            rc3.d           smi.conf       update-motd.d
bash_completion dnsmasq.d      doc-base        dnsmasq.conf    nikt.conf       rc0.d            rc4.d           snmp           updatedb.conf
bash_completion.d dnsmasq.d      dnsmasq.conf    dnsmasq.conf    nsswitch.conf   rc0.d            rc5.d           speech-dispatcher usb_modeswitch.conf
bindresport.blacklist dnsmasq.d      dnsmasq.conf    dnsmasq.conf    nsswitch.conf   rc0.d            rc6.d           sqlmap         usb_modeswitch.d
binfmt.d         dnsmasq.d      dnsmasq.conf    dnsmasq.conf    odbc.ini        rc0.d            rc6.d           ssh            vconsole.conf
bluetooth        dnsmasq.d      dnsmasq.conf    dnsmasq.conf    odbcinst.ini   rc0.d            rc6.d           ssl            vdpau_wrapper.cfg
ca-certificates dnsmasq.d      dnsmasq.conf    dnsmasq.conf    openal          rc0.d            rc6.d           sslsplit       vim
ca-certificates.conf dnsmasq.d      dnsmasq.conf    dnsmasq.conf    openfortivpn   rc0.d            rc6.d           strongswan.conf vm
ca-certificates.conf.dpkg-old dnsmasq.d      dnsmasq.conf    dnsmasq.conf    openssl        rc0.d            rc6.d           strongswan.d  vulkan
chatscripts     dnsmasq.d      dnsmasq.conf    dnsmasq.conf    opensc         rc0.d            rc6.d           stunnel       wgetrc
chromium        dnsmasq.d      dnsmasq.conf    dnsmasq.conf    openvas        rc0.d            rc6.d           subgid        wifreshark
chromium.d      dnsmasq.d      dnsmasq.conf    dnsmasq.conf    openvpn        rc0.d            rc6.d           subgid        wpa_supplicant
cifs-utils     dnsmasq.d      dnsmasq.conf    dnsmasq.conf    opt            rc0.d            rc6.d           subuid        xattr.conf
cloud          dnsmasq.d      dnsmasq.conf    dnsmasq.conf    os-release     rc0.d            rc6.d           subuid        xdg
color          dnsmasq.d      dnsmasq.conf    dnsmasq.conf    pam.d          rc0.d            rc6.d           subversion   xfce4
console-setup  dnsmasq.d      dnsmasq.conf    dnsmasq.conf    pam.d          rc0.d            rc6.d           sudo          xml
cracklib       dnsmasq.d      dnsmasq.conf    dnsmasq.conf    pam.d          rc0.d            rc6.d           sudo_logsrvd.conf xrdp
credstore     dnsmasq.d      dnsmasq.conf    dnsmasq.conf    passwd        rc0.d            rc6.d           sudoers      zsh
credstore.encrypted dnsmasq.d      dnsmasq.conf    dnsmasq.conf    passwd        rc0.d            rc6.d           sudoers.d    zsh_command_not_found
cron.d         dnsmasq.d      dnsmasq.conf    dnsmasq.conf    parted        rc0.d            rc6.d           supercat
cron.daily     dnsmasq.d      dnsmasq.conf    dnsmasq.conf    php            rc0.d            rc6.d           sv
```

**Step 7:** Perform a “long display” listing of the files in the current directory



```
(raneem@kali)-[~/etc]
└─$ ls -l
total 1536
drwxr-xr-x  2 root  root    4096 May 19 01:07 ImageMagick-6
drwxr-xr-x  4 root  root    4096 May 19 01:05 ModemManager
drwxr-xr-x  8 root  root    4096 May 19 02:01 NetworkManager
drwxr-xr-x  2 root  root    4096 Aug  9 2023 ODBCDataSources
drwxr-xr-x  3 root  root    4096 May 19 01:01 OpenCL
drwxr-xr-x  2 root  root    4096 May 19 01:10 UPower
drwxr-xr-x 11 root  root    4096 May 19 02:01 X11
-rw-r--r--  1 root  root    3386 Jun 27 2023 adduser.conf
drwxr-xr-x  3 root  root    4096 May 19 00:54 alsa
drwxr-xr-x  2 root  root   20480 May 19 02:05 alternatives
drwxr-xr-x  8 root  root    4096 May 19 01:16 apache2
drwxr-xr-x  2 root  root    4096 May 19 01:54 apparmor
drwxr-xr-x  9 root  root    4096 May 19 01:54 apparmor.d
drwxr-xr-x  8 root  root    4096 May 19 01:23 apt
drwxr-xr-x  2 root  root    4096 May 19 01:08 arp-scan
drwxr-xr-x  3 root  root    4096 May 19 01:12 avahi
-rw-r--r--  1 root  root    1994 Nov 26 03:09 bash.bashrc
-rw-r--r--  1 root  root     45 Jan 24 2020 bash_completion
drwxr-xr-x  2 root  root    4096 May 19 02:00 bash_completion.d
-rw-r--r--  1 root  root     367 Sep 22 2022 bindresvport.blacklist
drwxr-xr-x  2 root  root    4096 Jan 29 05:46 binfmt.d
drwxr-xr-x  2 root  root    4096 May 19 01:11 bluetooth
drwxr-xr-x  3 root  root    4096 May 19 00:54 ca-certificates
-rw-r--r--  1 root  root    6629 May 19 02:01 ca-certificates.conf
-rw-r--r--  1 root  root    5989 May 19 01:08 ca-certificates.conf.dpkg-old
drwxr-s---  2 root  dip     4096 May 19 01:08 chatscripts
drwxr-xr-x  2 root  root    4096 May 19 02:05 chromium
drwxr-xr-x  2 root  root    4096 May 19 02:05 chromium.d
drwxr-xr-x  2 root  root    4096 May 19 01:13 cifs-utils
drwxr-xr-x  3 root  root    4096 May 19 01:01 cloud
drwxr-xr-x  2 colord colord  4096 May 19 02:02 colord
drwxr-xr-x  2 root  root    4096 May 19 11:15 console-setup
drwxr-xr-x  2 root  root    4096 May 19 01:08 cracklib
drwx----- 2 root  root    4096 Jan 29 05:46 credstore
drwx----- 2 root  root    4096 Jan 29 05:46 credstore.encrypted
drwxr-xr-x  2 root  root    4096 May 19 02:00 cron.d
drwxr-xr-x  2 root  root    4096 May 19 02:02 cron.daily
drwxr-xr-x  2 root  root    4096 May 19 02:00 cron.hourly
drwxr-xr-x  2 root  root    4096 May 19 02:00 cron.monthly
drwxr-xr-x  2 root  root    4096 May 19 02:00 cron.weekly
drwxr-xr-x  2 root  root    4096 May 19 02:00 cron.yearly
-rw-r--r--  1 root  root    1042 Jan 21 06:10 crontab
drwxr-xr-x  2 root  root    4096 May 19 01:07 cryptsetup-initramfs
drwxr-xr-x  2 root  root    4096 Aug 14 2023 cryptsetup-nuka-password
-rw-r--r--  1 root  root     54 May 19 00:58 crypttab
```

**Step 8:** List all the files in the current directory that begin with the letter s



```
(raneem@kali)-[~/etc]
└─$ ls s*
screenrc          sensors3.conf    shadow           shells           smi.conf         subgid           subuid           sudo.conf        sudoers
searchsploit_rc  services        shadow-         smartd.conf     strongswan.conf subgid-         subuid-         sudo_logsrvd.conf sysctl.conf

samba:
gdbcommands      smb.conf        tls

sane.d:
abatou.conf      canon630u.conf  dc240.conf      epsomds.conf    hp5400.conf     ma1509.conf     net.conf        rts8891.conf    sty680.conf    umax_pp.conf
agfafocus.conf  canon_dr.conf   dc25.conf       escl.conf       hpsj5s.conf     magicolor.conf  p5.conf         s9036.conf      tamarack.conf  xerox_mfp.conf
airscan.conf    canon_lide70.conf dell1600n_net.conf fujitsu.conf   hs2p.conf       matsushita.conf pie.conf        saned.conf      tecol.conf     test.conf
apple.conf      canon_pp.conf   dll.conf        genesys.conf    ibm.conf        microtek.conf   pieusb.conf     sceptre.conf    tecol.conf     test.conf
artec.conf      cardscan.conf   dmi.d           gphoto2.conf   kodak.conf      microtek2.conf  pixma.conf      sharp.conf      tecol.conf     test.conf
artec_eplus48u.conf coolscan.conf   dmc.conf        gt68xx.conf     kodakaiio.conf mustek.conf     plusmk.conf     sm3840.conf    test.conf
avision.conf    coolscan2.conf  epjitsu.conf    hp.conf         kvs1025.conf   mustek_pp.conf  plusmk_pp.conf  sm3840.conf    test.conf
bh.conf         coolscan3.conf  epson.conf      hp3900.conf     leo.conf        mustek_usb.conf plusmk_usb.conf  sp15c.conf     test.conf
canon.conf      dc210.conf     epson2.conf     hp4200.conf     lexmark.conf    nec.conf        ricoh.conf      st400.conf     test.conf

scalpel:
scalpel.conf

sddm.conf.d:
kde_settings.conf

security:
access.conf      group.conf      limits.d        namespace.d      opasswd          pwquality.conf  time.conf
faillock.conf   limits.conf     namespace.conf  namespace.init   pam_env.conf     sepermit.conf   user_map.conf

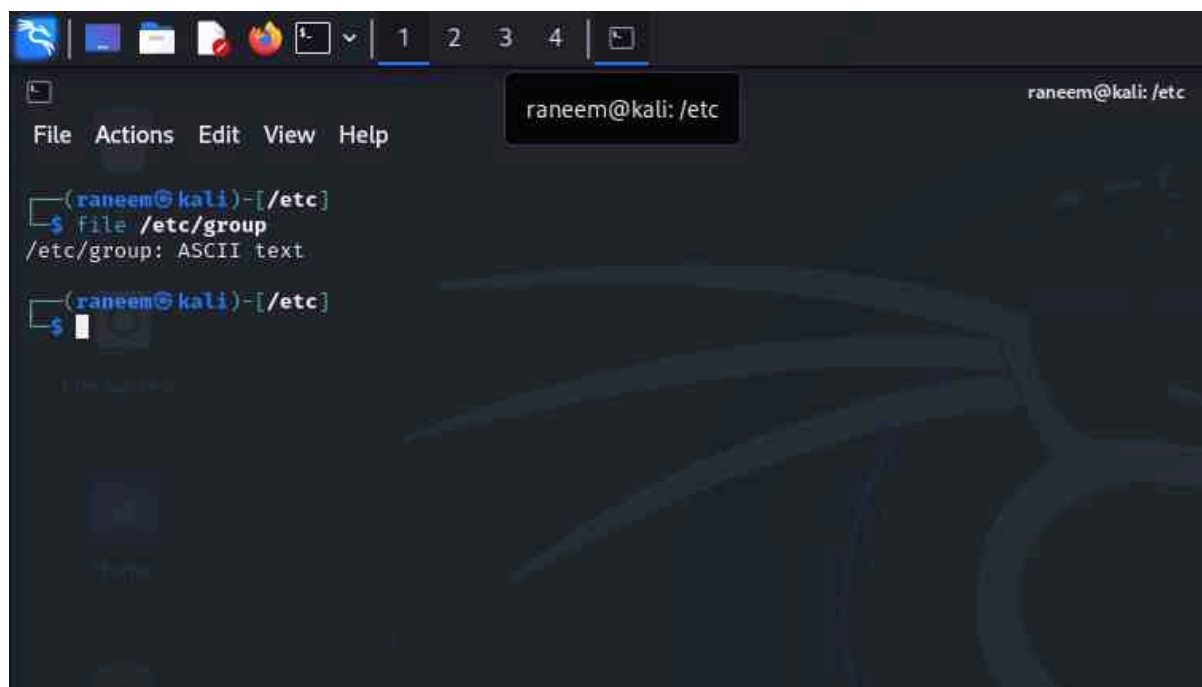
selinux:
semanage.conf

sensors.d:

sgml:
catalog          docbook-xml     docbook-xml.cat sgml-data.cat   xml-core.cat

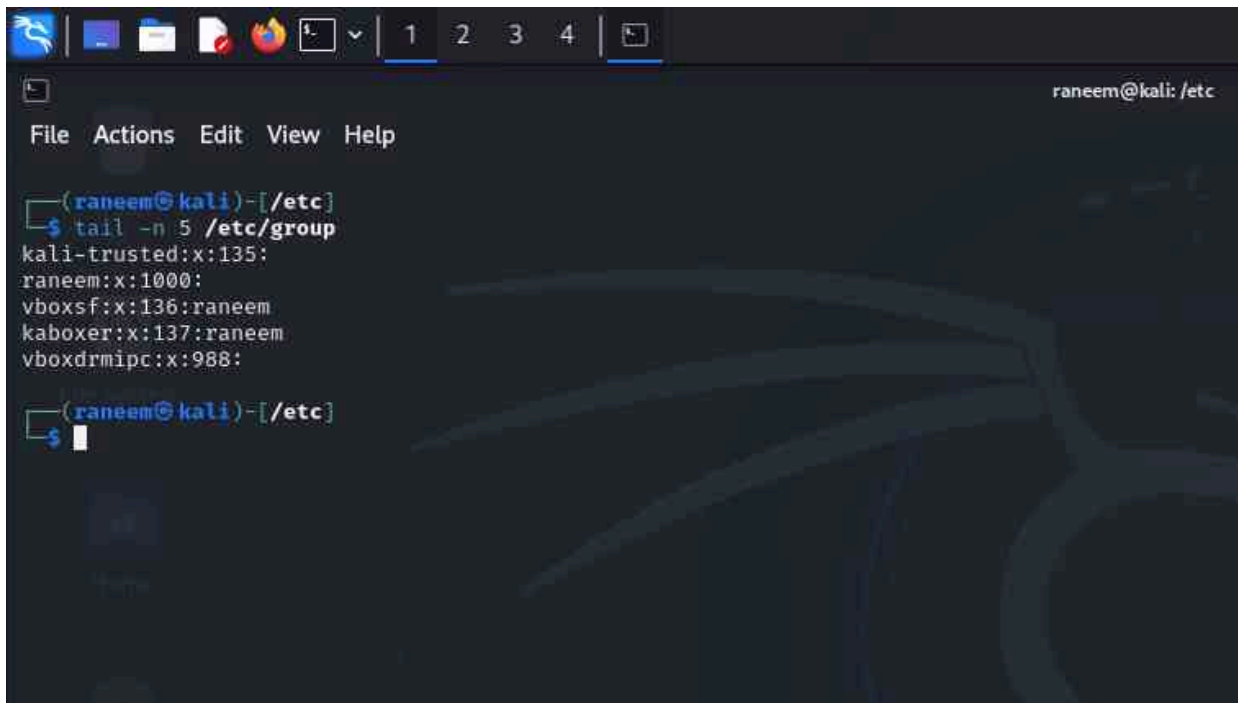
skel:
```

**Step 9:** Run the command that will determine the type of contents in the /etc/group file



```
(raneem@kali)-[~/etc]
└─$ file /etc/group
/etc/group: ASCII text
```

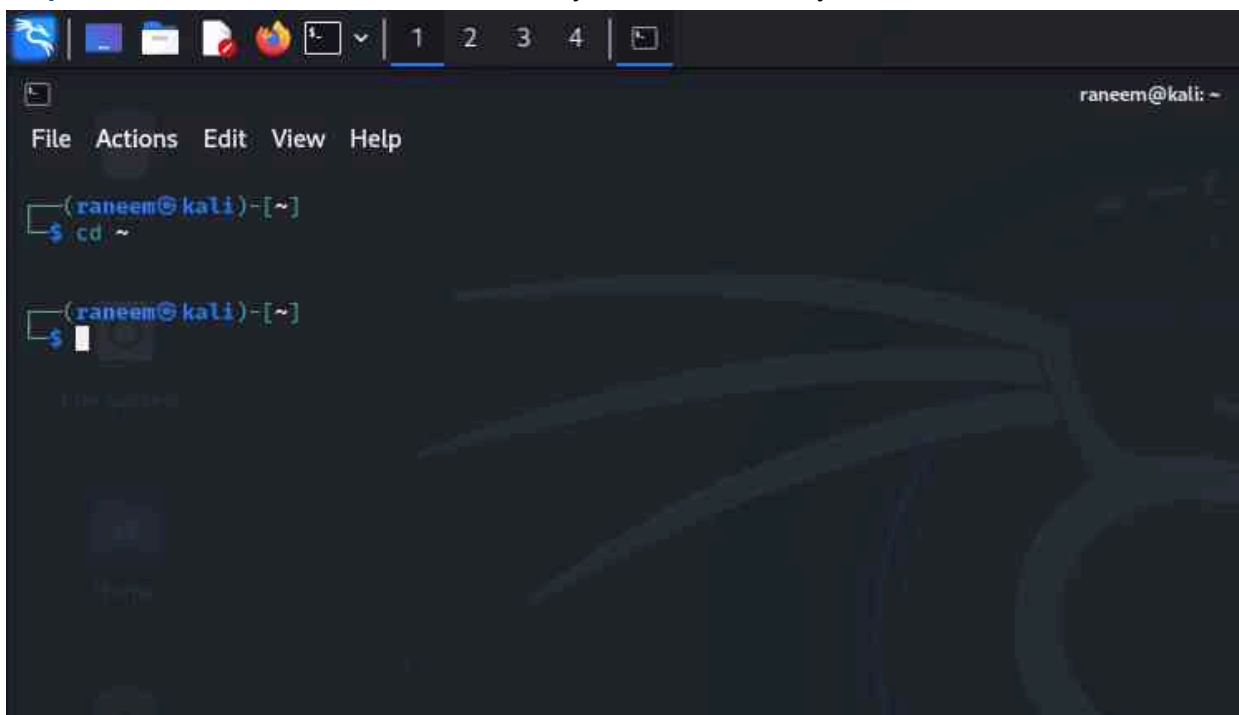
**Step 10:** Display only the last five lines of the /etc/group file



A terminal window on a Kali Linux system. The title bar shows the user 'raneem@kali' and the current directory '/etc'. The terminal has a menu bar with 'File', 'Actions', 'Edit', 'View', and 'Help'. The prompt is '(raneem@kali)-[/etc]'. The user enters the command '\$ tail -n 5 /etc/group'. The output shows the last five lines of the file: 'kali-trusted:x:135:', 'raneem:x:1000:', 'vboxsf:x:136:raneem', 'kaboxer:x:137:raneem', and 'vboxdrmpic:x:988:'. The prompt returns to '(raneem@kali)-[/etc]' with a cursor on the next line.

```
(raneem@kali)-[/etc]
└─$ tail -n 5 /etc/group
kali-trusted:x:135:
raneem:x:1000:
vboxsf:x:136:raneem
kaboxer:x:137:raneem
vboxdrmpic:x:988:
(raneem@kali)-[/etc]
└─$
```

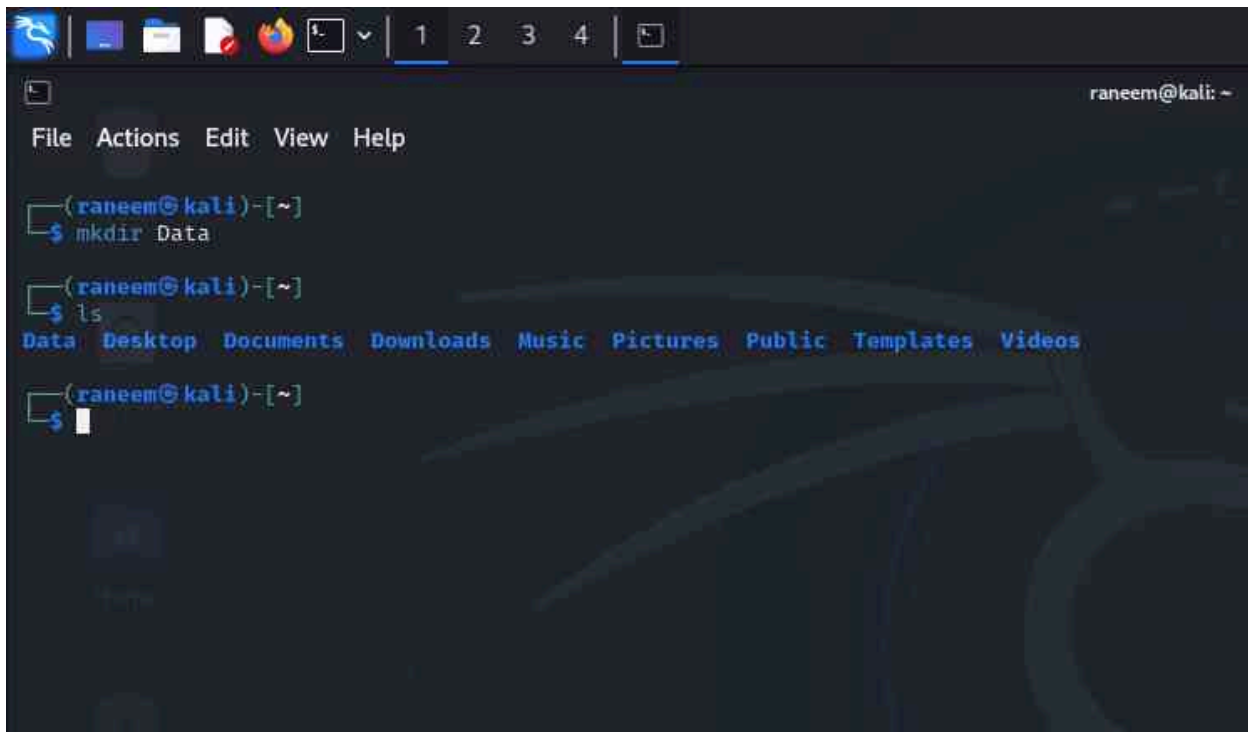
**Step 11:** Execute the command to return to your home directory



A terminal window on a Kali Linux system. The title bar shows the user 'raneem@kali' and the current directory '~'. The terminal has a menu bar with 'File', 'Actions', 'Edit', 'View', and 'Help'. The prompt is '(raneem@kali)-[~]'. The user enters the command '\$ cd ~'. The prompt returns to '(raneem@kali)-[~]' with a cursor on the next line.

```
(raneem@kali)-[~]
└─$ cd ~
(raneem@kali)-[~]
└─$
```

**Step 12:** Make a directory named data in the current directory



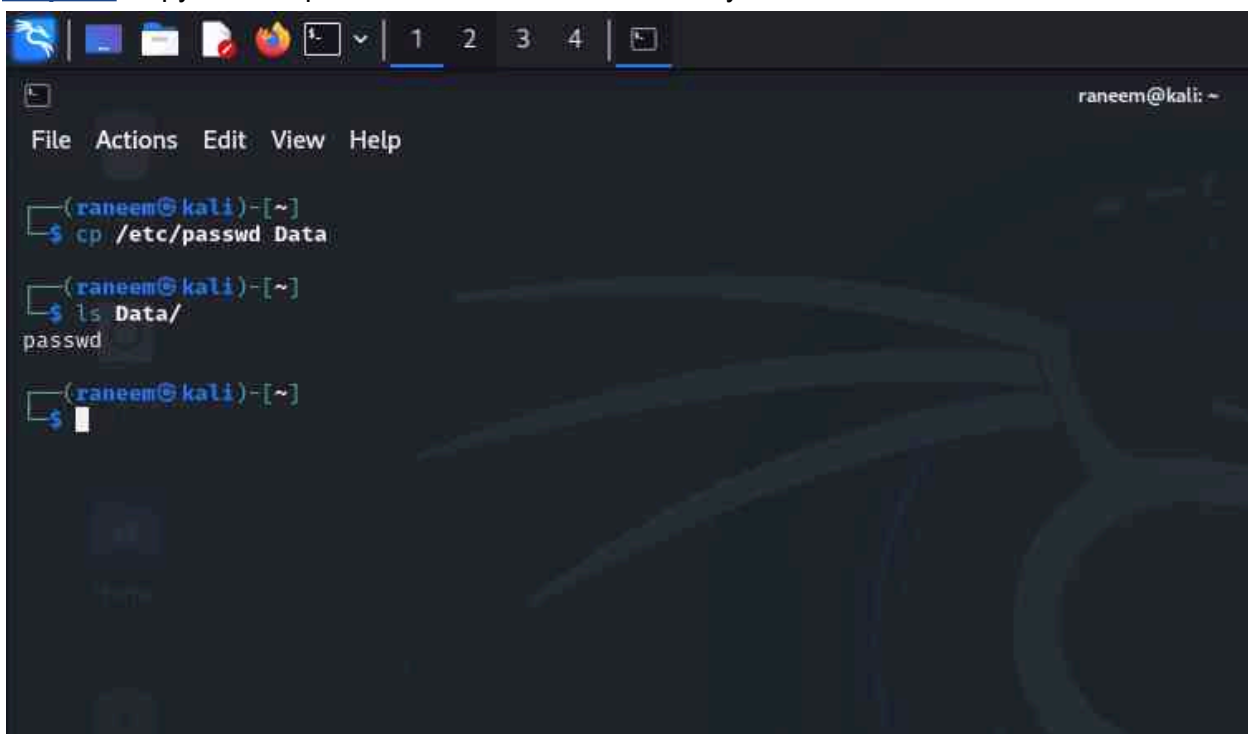
A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ mkdir Data

(raneem@kali)-[~]
└─$ ls
Data Desktop Documents Downloads Music Pictures Public Templates Videos

(raneem@kali)-[~]
└─$
```

**Step 13:** Copy the /etc/passwd file into the data directory



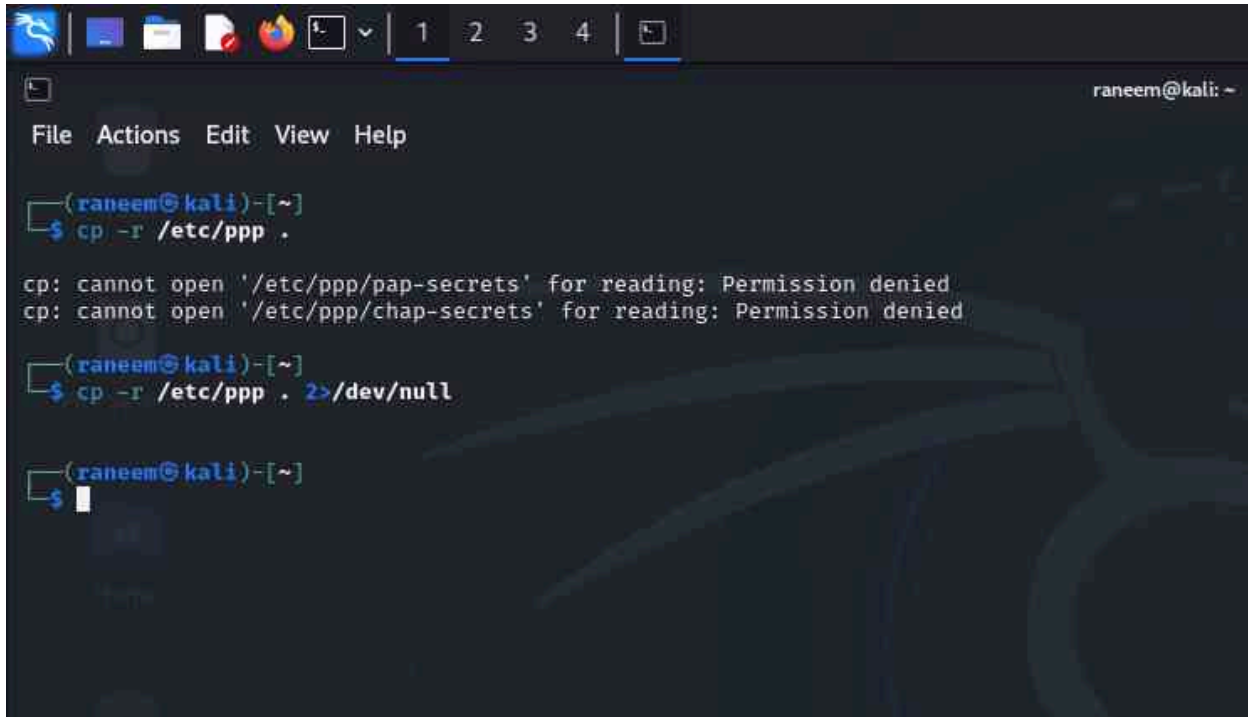
A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ cp /etc/passwd Data

(raneem@kali)-[~]
└─$ ls Data/
passwd

(raneem@kali)-[~]
└─$
```

**Step 14:** Copy the /etc/ppp directory into the current directory (and ignore any “Permission denied” error messages)



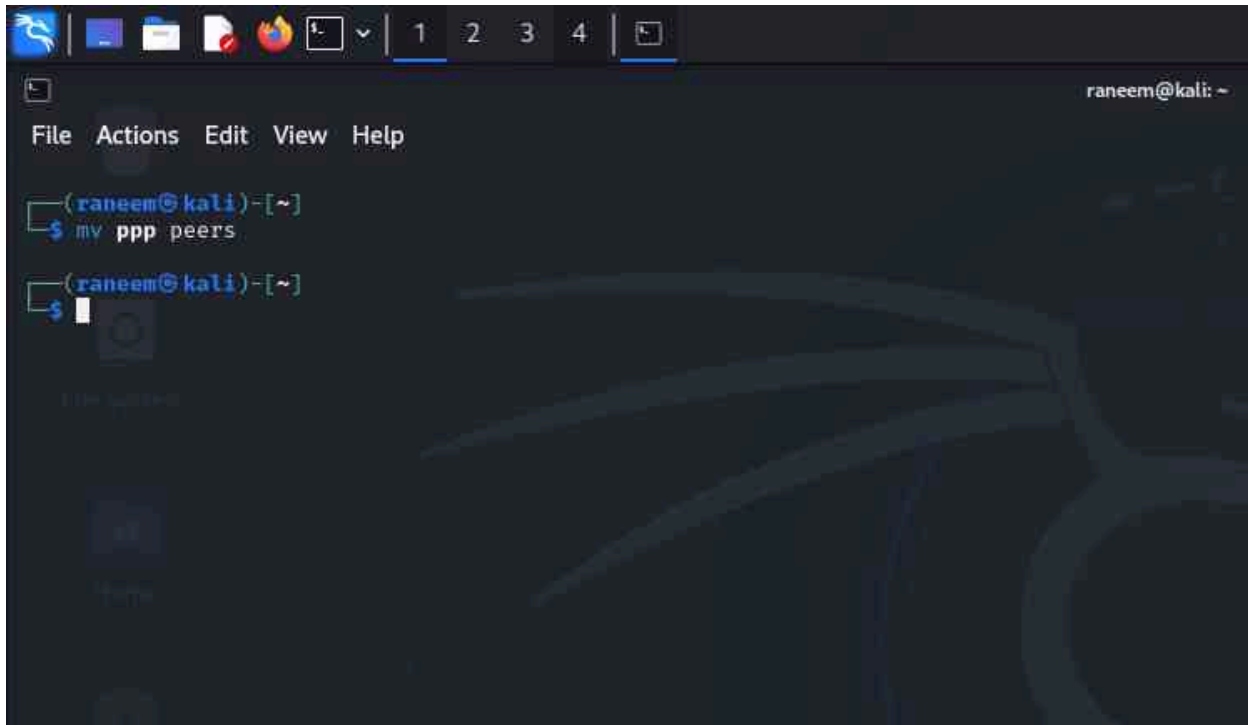
```
(raneem@kali)=[~]
└─$ cp -r /etc/ppp .

cp: cannot open '/etc/ppp/pap-secrets' for reading: Permission denied
cp: cannot open '/etc/ppp/chap-secrets' for reading: Permission denied

(raneem@kali)=[~]
└─$ cp -r /etc/ppp . 2>/dev/null

(raneem@kali)=[~]
└─$
```

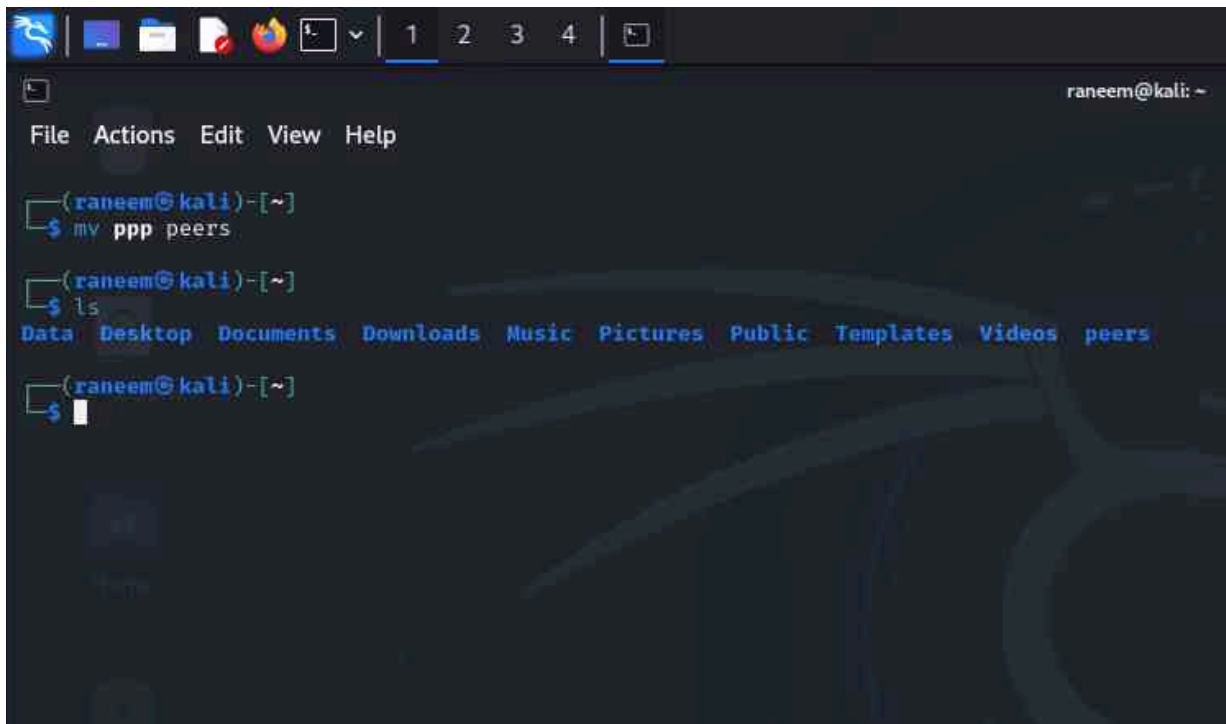
**Step 15:** Rename the ppp directory that is located in the current directory to peers



```
(raneem@kali)=[~]
└─$ mv ppp peers

(raneem@kali)=[~]
└─$
```

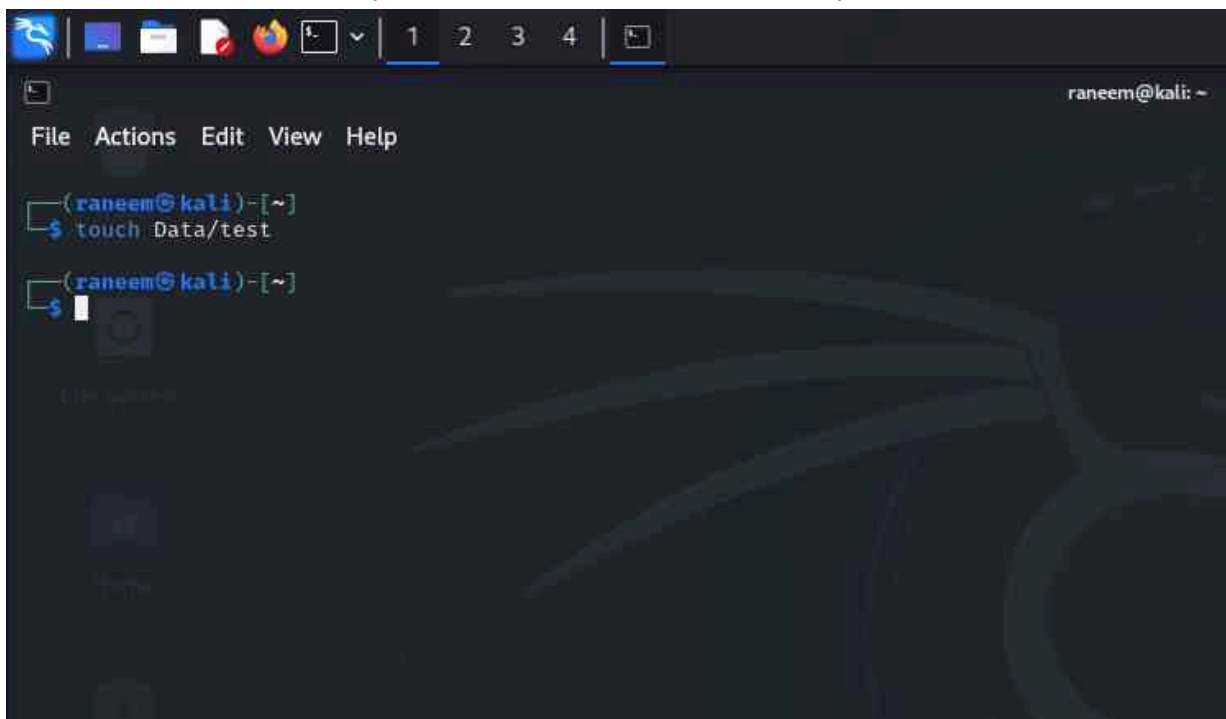
**Step 16:** Execute the command (ls) to verify the change in the name of the directory



A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the following sequence of commands and output:

```
(raneem@kali)-[~]
└─$ mv ppp peers
(raneem@kali)-[~]
└─$ ls
Data Desktop Documents Downloads Music Pictures Public Templates Videos peers
(raneem@kali)-[~]
└─$
```

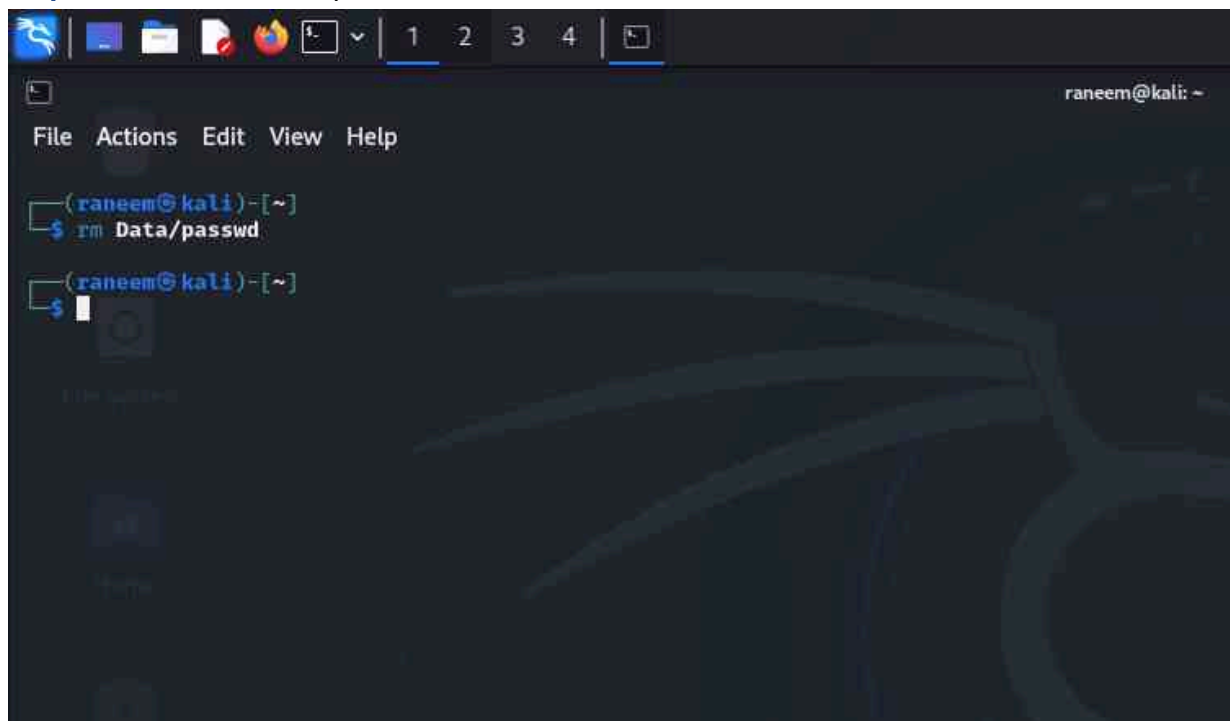
**Step 17:** Create a new empty file named test in the data directory



A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The terminal shows the following sequence of commands and output:

```
(raneem@kali)-[~]
└─$ touch Data/test
(raneem@kali)-[~]
└─$
```

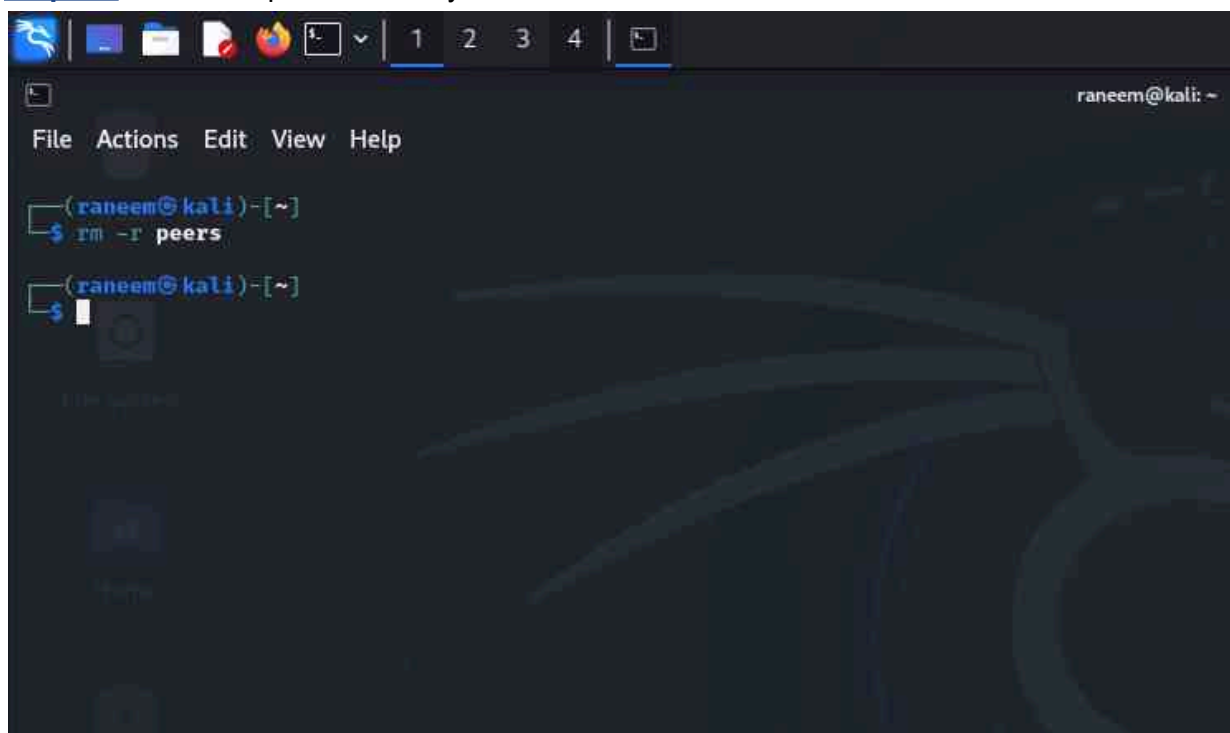
**Step 18:** Delete the data/passwd file



A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ rm Data/passwd
(raneem@kali)-[~]
└─$
```

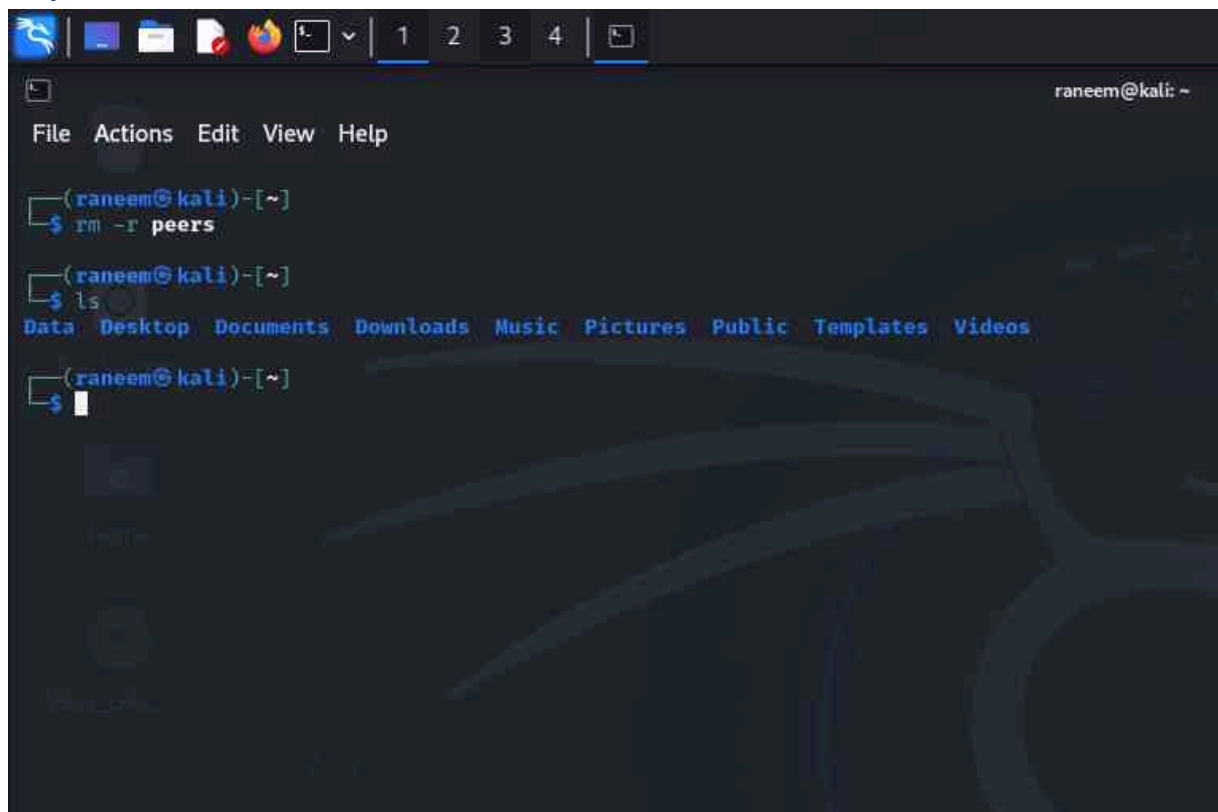
**Step 19:** Delete the peers directory



A terminal window on a Kali Linux system. The window title is "raneem@kali: ~". The terminal shows the following commands and output:

```
(raneem@kali)-[~]
└─$ rm -r peers
(raneem@kali)-[~]
└─$
```

**Step 20:** Re-execute the ls command



The image shows a terminal window with a dark background and light blue text. The window title is "raneem@kali: ~". The terminal output is as follows:

```
(raneem@kali)-[~]
└─$ rm -r peers

(raneem@kali)-[~]
└─$ ls
Data Desktop Documents Downloads Music Pictures Public Templates Videos

(raneem@kali)-[~]
└─$
```