



Unidade Acadêmica de Engenharia Elétrica – DEE

Capacitação: Microeletrônica

Professor (a): Gutemberg Gonçalves Santos, outros.

Sala: Bloco Embedded Horário: 2ª 18:00 – 20:00, 4ª 18:00-20:00

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Atividades Práticas - Introdução ao Linux

Prática 01 – Manipulação de arquivos

1. Vá até o seu diretório pessoal (/home/nome_do_seu_usuário).
2. Se certifique que está no diretório correto.
3. Crie um arquivo de texto abrindo o editor de texto gedit.

Figura 1: Comandos 1,2,3

```
opedromacedo@DESKTOP-9U6CEK9: $ pwd  
/home/opedromacedo  
opedromacedo@DESKTOP-9U6CEK9: $ gedit pratica.txt  
  
(gedit:4392): dconf-WARNING **: 22:05:20.978: failed to commit changes to dconf: Could not connect: No such file or directory  
(gedit:4392): dconf-WARNING **: 22:05:20.988: failed to commit changes to dconf: Could not connect: No such file or directory  
(gedit:4392): dconf-WARNING **: 22:05:21.108: failed to commit changes to dconf: Could not connect: No such file or directory  
(gedit:4392): dconf-WARNING **: 22:05:21.108: failed to commit changes to dconf: Could not connect: No such file or directory
```

Fonte: Meu terminal

4. Digite algumas linhas de texto, salve o arquivo com o nome desejado e feche o aplicativo. Mostre o conteúdo do arquivo na tela do terminal.
5. Copie o arquivo adicionando ao final do seu nome o número 1.
6. Liste os arquivos existentes na sua pasta pessoal.
7. Concatene e mostre na tela o conteúdo dos arquivos criados.

Figura 2: Comandos 4,5,6,7

```
opedromacedo@DESKTOP-9U6CEK9: $ cat pratica.txt  
"Hello World!"  
opedromacedo@DESKTOP-9U6CEK9: $ cp pratica.txt pratical.txt  
opedromacedo@DESKTOP-9U6CEK9: $ ls  
pratica.txt pratical.txt  
opedromacedo@DESKTOP-9U6CEK9: $ cat pratica.txt pratical.txt > concpratica.txt  
opedromacedo@DESKTOP-9U6CEK9: $ ls  
concpratica.txt pratica.txt pratical.txt  
opedromacedo@DESKTOP-9U6CEK9: $ cat concpratica.txt  
"Hello World!"  
"Hello World!"  
opedromacedo@DESKTOP-9U6CEK9: $ touch novo.txt  
opedromacedo@DESKTOP-9U6CEK9: $ ls  
concpratica.txt novo.txt pratica.txt pratical.txt  
opedromacedo@DESKTOP-9U6CEK9: $ ls -la  
total 80
```

Fonte: Meu terminal

8. Apague a cópia do arquivo criado.
9. Liste os arquivos existentes na sua pasta pessoal.
10. Crie um novo arquivo vazio.
11. Atualize a data de modificação do arquivo inicialmente criado.
12. Apague todos os arquivos criados.

Figura 3: Comandos 9,10,11

```

opedromacedo@DESKTOP-9U6CEK9: $ ls -la
total 80
drwxr-xr-- 6 opedromacedo opedromacedo 4096 May  2 22:07 .
drwxr-xr-x  3 root      root      4096 Apr 30 11:20 ..
-rw----- 1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r-- 1 opedromacedo opedromacedo 220 Apr 30 11:20 .bash_logout
-rw-r--r-- 1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwxr-xr-x  4 opedromacedo opedromacedo 4096 May  2 21:18 .config
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r-- 1 opedromacedo opedromacedo 807 Apr 30 11:20 .profile
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r-- 1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-r--r-- 1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw----- 1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rw-r--r-- 1 opedromacedo opedromacedo   30 May  2 22:06 concpratica.txt
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  2 22:07 novo.txt
-rw-r--r-- 1 opedromacedo opedromacedo   15 May  2 22:05 pratica.txt
-rw-r--r-- 1 opedromacedo opedromacedo   15 May  2 22:06 practical.txt
opedromacedo@DESKTOP-9U6CEK9: $ touch -m pratica.txt
opedromacedo@DESKTOP-9U6CEK9: $ ls -la

```

Fonte: Meu terminal

Figura 4: Comandos 12

```

opedromacedo@DESKTOP-9U6CEK9: $ touch -m pratica.txt
opedromacedo@DESKTOP-9U6CEK9: $ ls -la
total 80
drwxr-xr-- 6 opedromacedo opedromacedo 4096 May  2 22:07 .
drwxr-xr-x  3 root      root      4096 Apr 30 11:20 ..
-rw----- 1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r-- 1 opedromacedo opedromacedo 220 Apr 30 11:20 .bash_logout
-rw-r--r-- 1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwxr-xr-x  4 opedromacedo opedromacedo 4096 May  2 21:18 .config
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r-- 1 opedromacedo opedromacedo 807 Apr 30 11:20 .profile
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r-- 1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-r--r-- 1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw----- 1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rw-r--r-- 1 opedromacedo opedromacedo   30 May  2 22:06 concpratica.txt
-rw-r--r-- 1 opedromacedo opedromacedo     0 May  2 22:07 novo.txt
-rw-r--r-- 1 opedromacedo opedromacedo   15 May  2 22:05 pratica.txt
-rw-r--r-- 1 opedromacedo opedromacedo   15 May  2 22:06 practical.txt
opedromacedo@DESKTOP-9U6CEK9: $ rm -rf pratica.txt
opedromacedo@DESKTOP-9U6CEK9: $ rm concpratica.txt
opedromacedo@DESKTOP-9U6CEK9: $ rm -rf novo.txt
opedromacedo@DESKTOP-9U6CEK9: $ rm -rf practical.txt
opedromacedo@DESKTOP-9U6CEK9: $ ls
opedromacedo@DESKTOP-9U6CEK9: $

```

Fonte: Meu terminal

Prática 02

1. Vá até o seu diretório pessoal (/home/nome_do_seu_usuário).
2. Crie um arquivo de texto vazio com o nome modificando_prioridades.txt
3. Utilize o comando ls para verificar quem é o proprietário do arquivo e qual o nível de acesso para cada usuário do sistema.

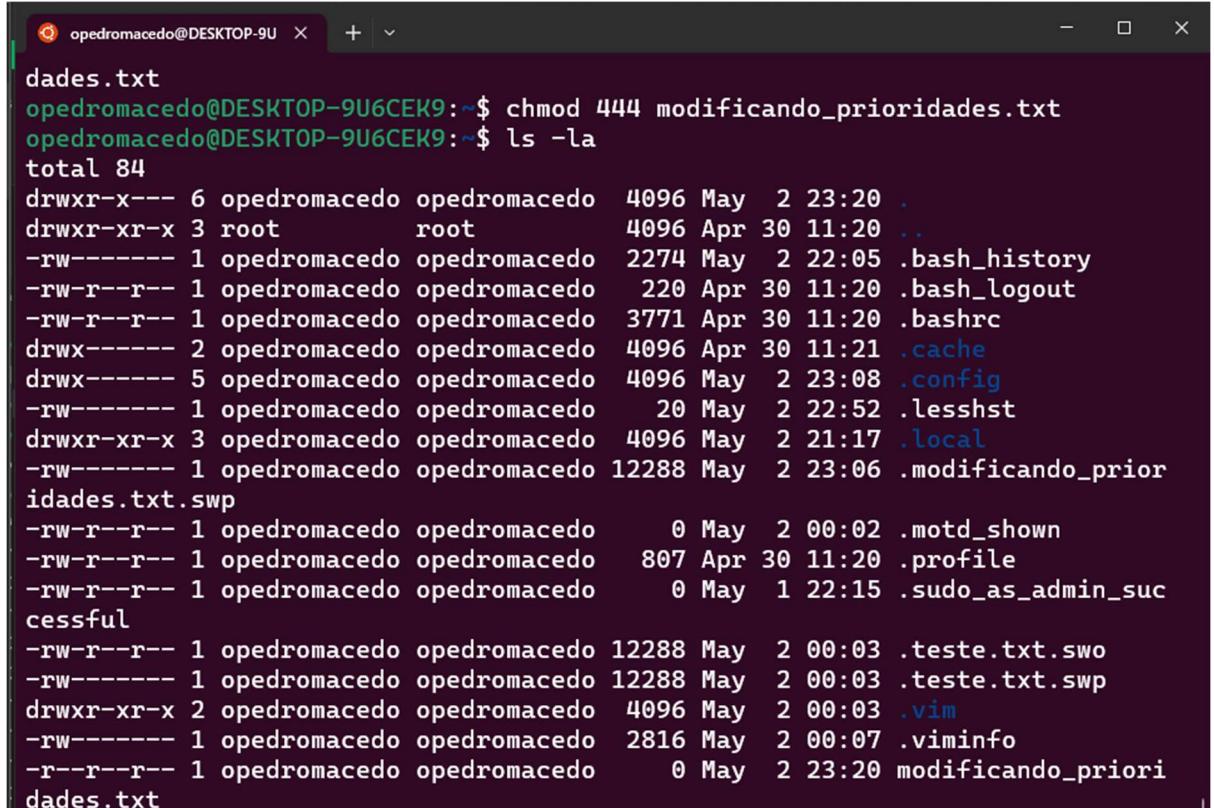
Figura 5: Comandos 1,2,3

```
opedromacedo@DESKTOP-9U6CEK9:~$ pwd
/home/opedromacedo
opedromacedo@DESKTOP-9U6CEK9:~$ touch modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls
modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:20 .
drwxr-xr-x  3 root      root        4096 Apr 30 11:20 ..
-rw-------  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo  220 Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo    20 May  2 22:52 .lessshst
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo   807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 23:20 modificando_prioridades.txt
```

Fonte: Meu terminal

4. Interprete a informação.
5. Modifique o nível de acesso utilizando os diferentes formatos de utilização dos comandos chmod e chown.
6. Adicione o nível de acesso de leitura para todos os usuários.

Figura 6: Comandos 4,5,6

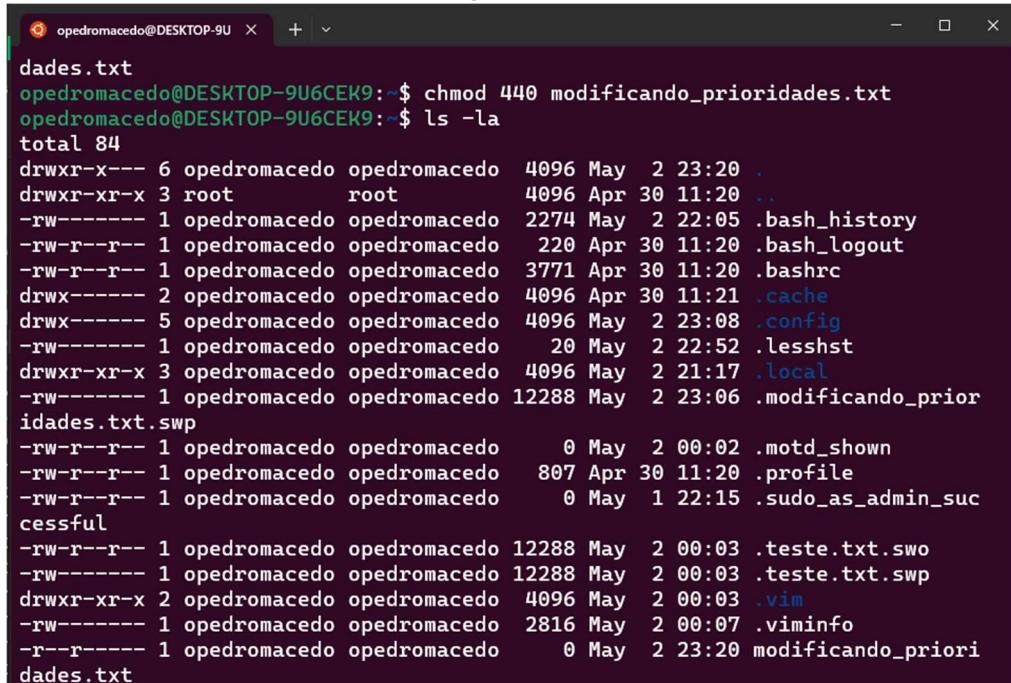


```
opedromacedo@DESKTOP-9U6CEK9:~$ chmod 444 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:20 .
drwxr-xr-x  3 root      root      4096 Apr 30 11:20 ..
-rw-----  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo 20  May  2 22:52 .lessshst
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo 807  Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-r--r--r--  1 opedromacedo opedromacedo     0 May  2 23:20 modificando_prioridades.txt
```

Fonte: Meu terminal

7. Remova o nível de leitura para outros usuários

Figura 7: Comando 7

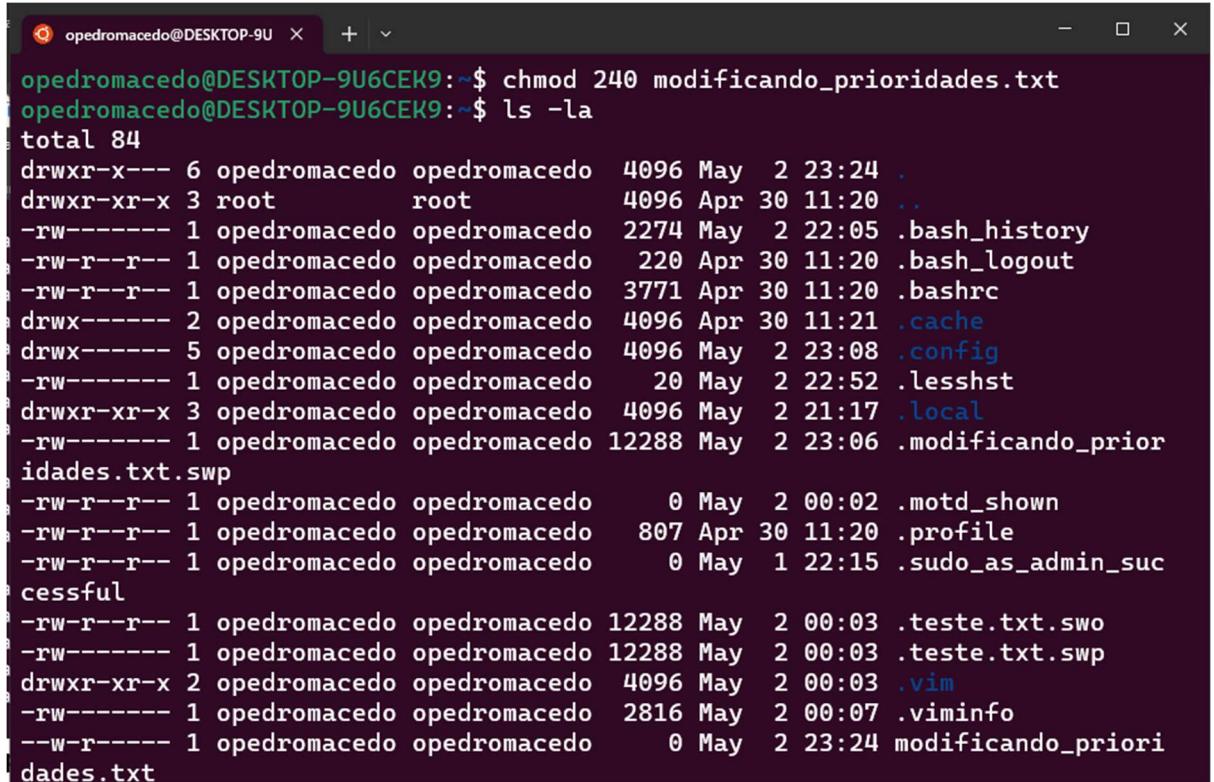


```
opedromacedo@DESKTOP-9U6CEK9:~$ chmod 440 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:20 .
drwxr-xr-x  3 root      root      4096 Apr 30 11:20 ..
-rw-----  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo 20  May  2 22:52 .lessshst
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo 807  Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-r--r--r--  1 opedromacedo opedromacedo     0 May  2 23:20 modificando_prioridades.txt
```

Fonte: Meu terminal

8. Estabeleça o nível de apenas escrita para o usuário proprietário.

Figura 8: Comando 8

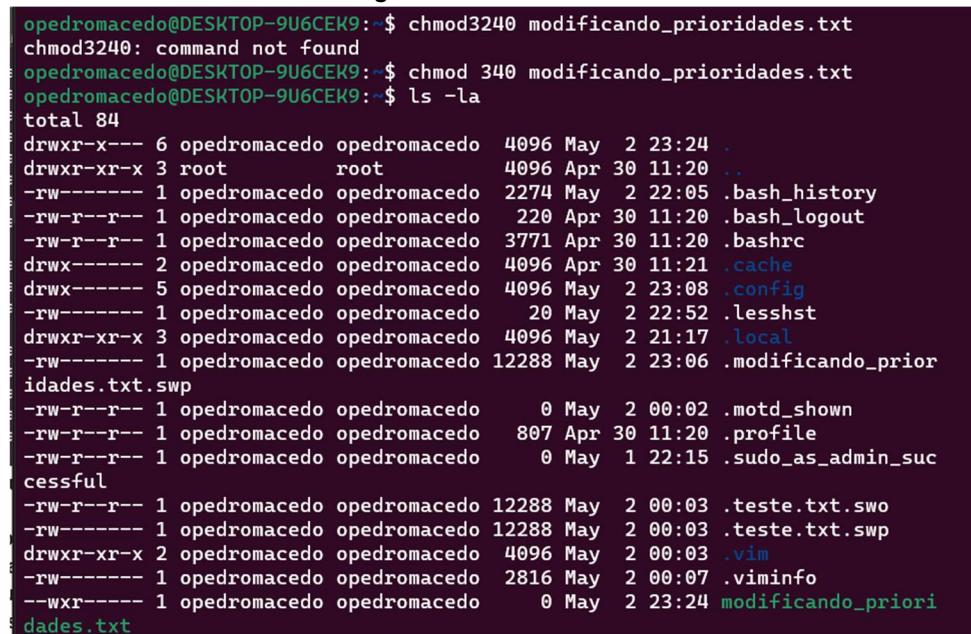


```
opedromacedo@DESKTOP-9U6CEK9:~$ chmod 240 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:24 .
drwxr-xr-x  3 root      root        4096 Apr 30 11:20 ..
-rw-------  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-------  1 opedromacedo opedromacedo   20 May  2 22:52 .lessht
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-------  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo  807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-------  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-------  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
--w-r----  1 opedromacedo opedromacedo     0 May  2 23:24 modificando_prioridades.txt
```

Fonte: Meu terminal

9. Adicione o nível de execução para o usuário proprietário.

Figura 9: Comando 9



```
opedromacedo@DESKTOP-9U6CEK9:~$ chmod3240 modificando_prioridades.txt
chmod3240: command not found
opedromacedo@DESKTOP-9U6CEK9:~$ chmod 340 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:24 .
drwxr-xr-x  3 root      root        4096 Apr 30 11:20 ..
-rw-------  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-------  1 opedromacedo opedromacedo   20 May  2 22:52 .lessht
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-------  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo  807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-------  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-------  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
--w-r----  1 opedromacedo opedromacedo     0 May  2 23:24 modificando_prioridades.txt
```

Fonte: Meu terminal

- 10. Modifique o proprietário do arquivo para root.root**
- 11. Tente ler o arquivo e verifique o que acontece.**
- 12. Utilizando o comando sudo, modifique o nível de acesso para leitura adicionando permissão para todos os usuários**
- 13. Tente novamente ler o arquivo.**

Figura 10: Comando 10,11,12,13

```
opedromacedo@DESKTOP-9U6CEK9:~$ sudo chown root.root modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ cat modificando_prioridades.txt
cat: modificando_prioridades.txt: Permission denied
opedromacedo@DESKTOP-9U6CEK9:~$ sudo chmod 744
chmod: missing operand after '744'
Try 'chmod --help' for more information.
opedromacedo@DESKTOP-9U6CEK9:~$ sudo chmod 744 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:24 .
drwxr-xr-x  3 root      root        4096 Apr 30 11:20 ..
-rw-------  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo   20 May  2 22:52 .lessshst
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo  807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rwrxr--r--  1 root      root        0 May  2 23:24 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ cat modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ gedit modificando_prioridades.txt
```

Fonte: Meu terminal

- 14. Tente modificar o conteúdo do arquivo e veja o que acontece.**
- Não é possível salva-lo.

15. Adicione o nível de escrita no arquivo para os demais usuários.

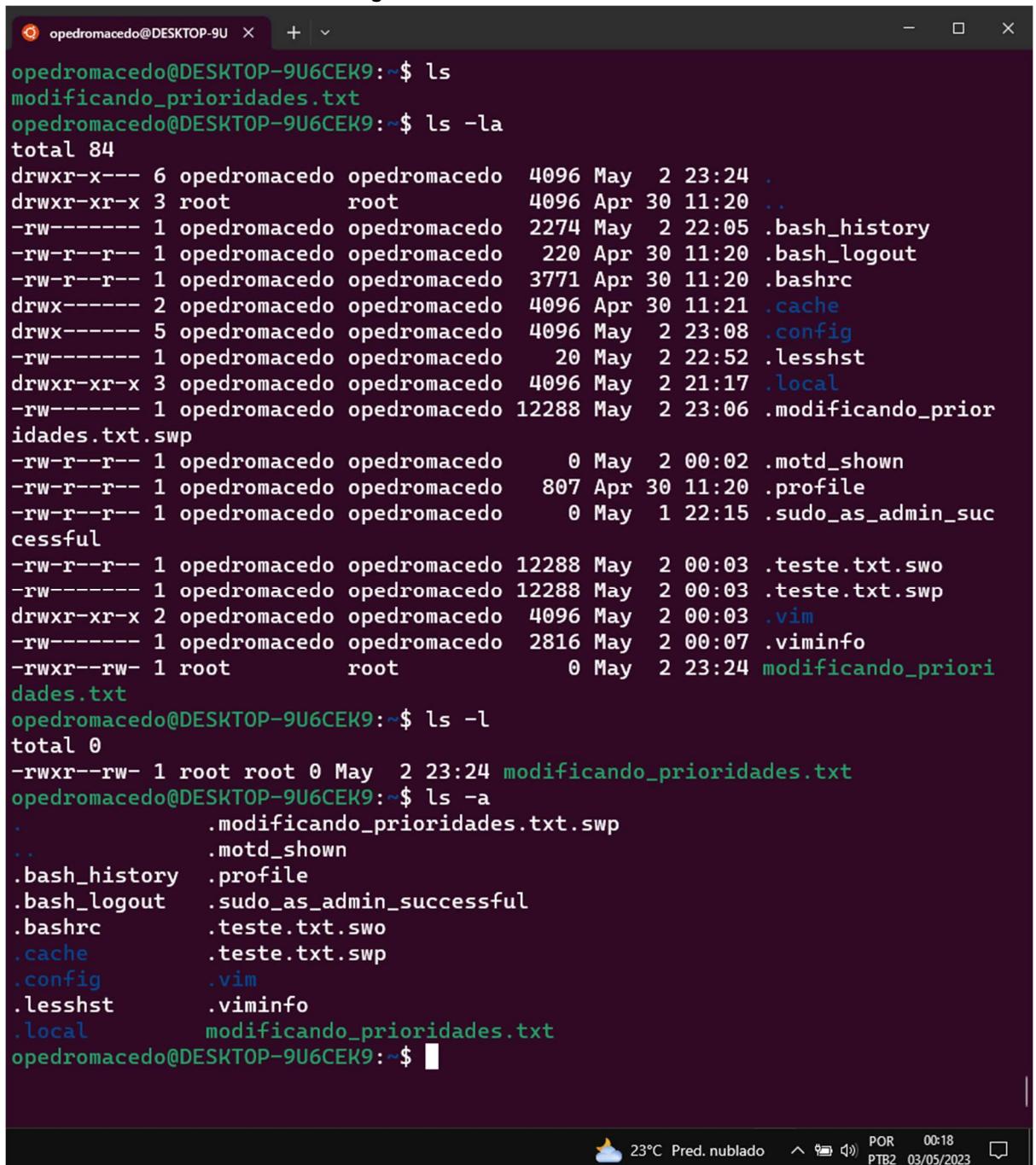
```
onf: Could not connect: No such file or directory
opedromacedo@DESKTOP-9U6CEK9: $ sudo chmod 746 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9: $ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:24 .
drwxr-xr-x  3 root      root        4096 Apr 30 11:20 ..
-rw-----  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo  220 Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo   20 May  2 22:52 .lesshist
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prior
idades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo  807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_suc
cessful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rwxr--rw-  1 root      root        0 May  2 23:24 modificando_prior
idades.txt
```

Exercícios

Comando ls

Exercício: Use o comando "ls" para listar os arquivos e diretórios presentes no diretório atual.

Figura 10: Comando ls



```
opedromacedo@DESKTOP-9U6CEK9:~$ ls
modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -la
total 84
drwxr-x--- 6 opedromacedo opedromacedo 4096 May  2 23:24 .
drwxr-xr-x  3 root      root      4096 Apr 30 11:20 ..
-rw-----  1 opedromacedo opedromacedo 2274 May  2 22:05 .bash_history
-rw-r--r--  1 opedromacedo opedromacedo 220  Apr 30 11:20 .bash_logout
-rw-r--r--  1 opedromacedo opedromacedo 3771 Apr 30 11:20 .bashrc
drwx----- 2 opedromacedo opedromacedo 4096 Apr 30 11:21 .cache
drwx----- 5 opedromacedo opedromacedo 4096 May  2 23:08 .config
-rw-----  1 opedromacedo opedromacedo  20 May  2 22:52 .lessshst
drwxr-xr-x  3 opedromacedo opedromacedo 4096 May  2 21:17 .local
-rw-----  1 opedromacedo opedromacedo 12288 May  2 23:06 .modificando_prioridades.txt.swp
-rw-r--r--  1 opedromacedo opedromacedo     0 May  2 00:02 .motd_shown
-rw-r--r--  1 opedromacedo opedromacedo  807 Apr 30 11:20 .profile
-rw-r--r--  1 opedromacedo opedromacedo     0 May  1 22:15 .sudo_as_admin_successful
-rw-r--r--  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swo
-rw-----  1 opedromacedo opedromacedo 12288 May  2 00:03 .teste.txt.swp
drwxr-xr-x  2 opedromacedo opedromacedo 4096 May  2 00:03 .vim
-rw-----  1 opedromacedo opedromacedo 2816 May  2 00:07 .viminfo
-rw xr--rw-  1 root      root      0 May  2 23:24 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -l
total 0
-rw xr--rw-  1 root      root      0 May  2 23:24 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -a
.               .modificando_prioridades.txt.swp
..              .motd_shown
.bash_history   .profile
.bash_logout    .sudo_as_admin_successful
.bashrc         .teste.txt.swo
.cache          .teste.txt.swp
.config         .vim
.lessshst       .viminfo
.local          modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$
```

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PTB2 03/05/2023

Fonte: Meu Terminal

Comando cd

Exercício: Mude para o diretório "home" e, em seguida, volte para o diretório anterior.

Comando mkdir

Exercício: Crie um novo diretório chamado "teste".

Comando touch

Exercício: Crie um novo arquivo chamado "arquivo.txt".

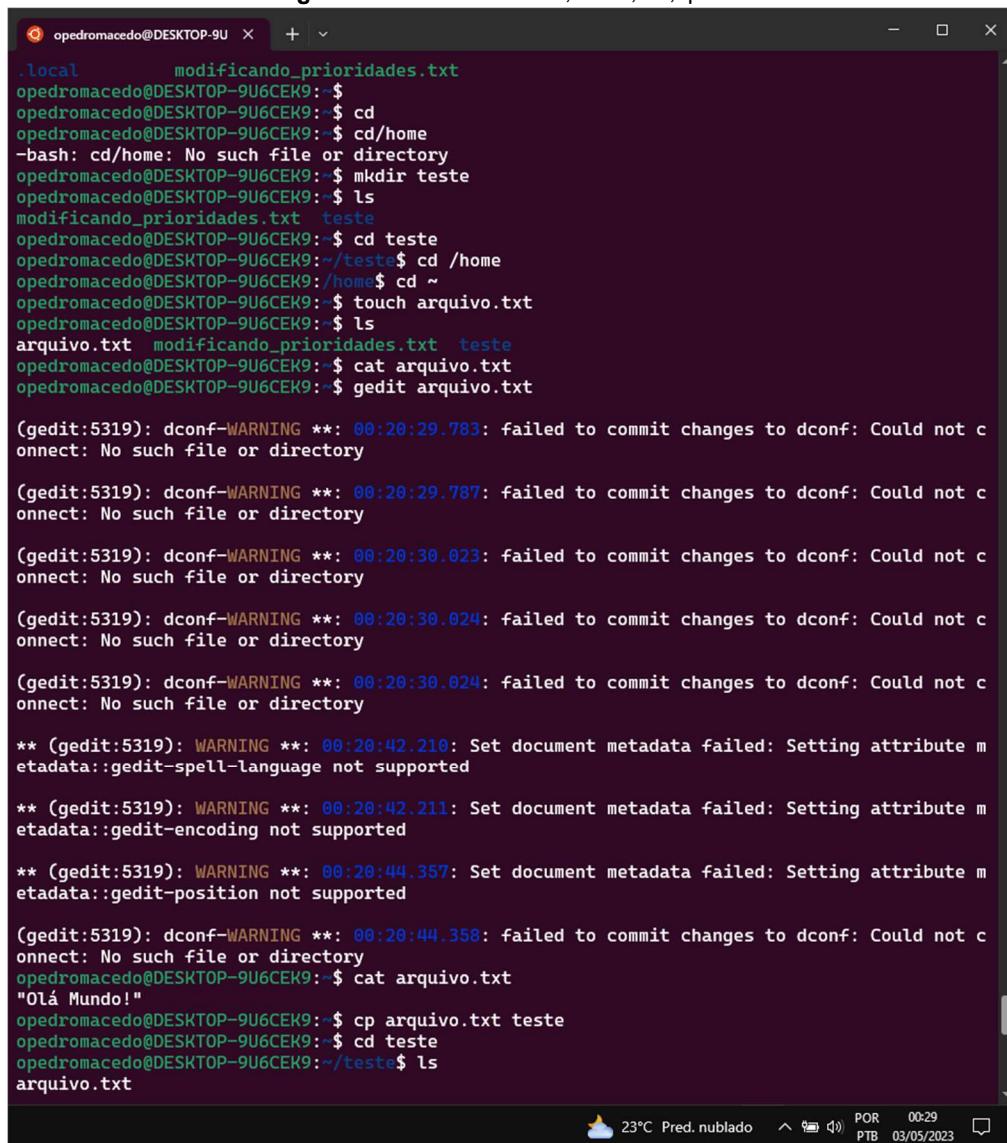
Comando cat

Exercício: Crie um arquivo chamado "arquivo.txt" e adicione algum texto. Em seguida, use o comando "cat" para exibir o conteúdo do arquivo.

Comando cp

Exercício: Copie o arquivo "arquivo.txt" para o diretório "teste".

Figura 12: Comando mkdir,touch,cat,cp



```
opedromacedo@DESKTOP-9U6CEK9: ~
```

```
.local      modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9: $ 
opedromacedo@DESKTOP-9U6CEK9: $ cd
opedromacedo@DESKTOP-9U6CEK9: $ cd/home
-bash: cd/home: No such file or directory
opedromacedo@DESKTOP-9U6CEK9: $ mkdir teste
opedromacedo@DESKTOP-9U6CEK9: $ ls
modificando_prioridades.txt  teste
opedromacedo@DESKTOP-9U6CEK9: $ cd teste
opedromacedo@DESKTOP-9U6CEK9: ~/teste$ cd /home
opedromacedo@DESKTOP-9U6CEK9:/home$ cd ~
opedromacedo@DESKTOP-9U6CEK9: $ touch arquivo.txt
opedromacedo@DESKTOP-9U6CEK9: $ ls
arquivo.txt  modificando_prioridades.txt  teste
opedromacedo@DESKTOP-9U6CEK9: $ cat arquivo.txt
opedromacedo@DESKTOP-9U6CEK9: $ gedit arquivo.txt

(gedit:5319): dconf-WARNING **: 00:20:29.783: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5319): dconf-WARNING **: 00:20:29.787: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5319): dconf-WARNING **: 00:20:30.023: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5319): dconf-WARNING **: 00:20:30.024: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5319): dconf-WARNING **: 00:20:30.024: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5319): dconf-WARNING **: 00:20:30.024: failed to commit changes to dconf: Could not connect: No such file or directory

** (gedit:5319): WARNING **: 00:20:42.210: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported

** (gedit:5319): WARNING **: 00:20:42.211: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported

** (gedit:5319): WARNING **: 00:20:44.357: Set document metadata failed: Setting attribute metadata::gedit-position not supported

(gedit:5319): dconf-WARNING **: 00:20:44.358: failed to commit changes to dconf: Could not connect: No such file or directory
opedromacedo@DESKTOP-9U6CEK9: $ cat arquivo.txt
"Olá Mundo!"
opedromacedo@DESKTOP-9U6CEK9: $ cp arquivo.txt teste
opedromacedo@DESKTOP-9U6CEK9: $ cd teste
opedromacedo@DESKTOP-9U6CEK9: ~/teste$ ls
arquivo.txt
```

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POR PTB 03/05/2023

Fonte: Meu Terminal

Comando mv

Exercício: Renomeie o arquivo "arquivo.txt" para "arquivo-renomeado.txt".

Comando rm

Exercício: Exclua o arquivo "arquivo-renomeado.txt" e o diretório "teste".

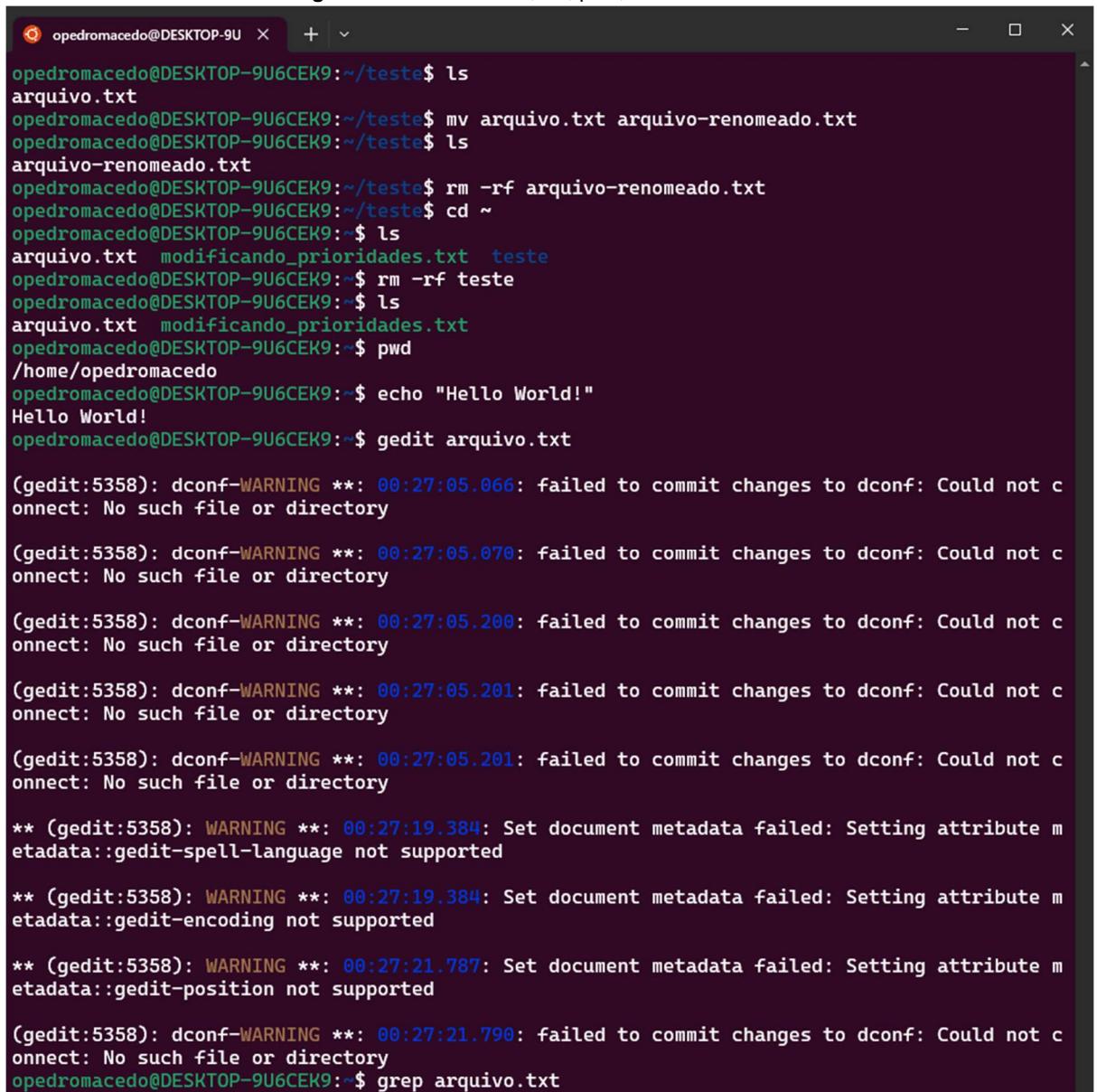
Comando pwd

Exercício: Use o comando "pwd" para exibir o diretório atual.

Comando echo

Exercício: Use o comando "echo" para exibir uma mensagem na tela.

Figura 13: Comando mv, rm, pwd, echo



```
opedromacedo@DESKTOP-9U6CEK9:~/teste$ ls
arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~/teste$ mv arquivo.txt arquivo-renomeado.txt
opedromacedo@DESKTOP-9U6CEK9:~/teste$ ls
arquivo-renomeado.txt
opedromacedo@DESKTOP-9U6CEK9:~/teste$ rm -rf arquivo-renomeado.txt
opedromacedo@DESKTOP-9U6CEK9:~/teste$ cd ~
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo.txt  modificando_prioridades.txt  teste
opedromacedo@DESKTOP-9U6CEK9:~$ rm -rf teste
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo.txt  modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ pwd
/home/opedromacedo
opedromacedo@DESKTOP-9U6CEK9:~$ echo "Hello World!"
Hello World!
opedromacedo@DESKTOP-9U6CEK9:~$ gedit arquivo.txt

(gedit:5358): dconf-WARNING **: 00:27:05.066: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5358): dconf-WARNING **: 00:27:05.070: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5358): dconf-WARNING **: 00:27:05.200: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5358): dconf-WARNING **: 00:27:05.201: failed to commit changes to dconf: Could not connect: No such file or directory

(gedit:5358): dconf-WARNING **: 00:27:05.201: failed to commit changes to dconf: Could not connect: No such file or directory

** (gedit:5358): WARNING **: 00:27:19.384: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported

** (gedit:5358): WARNING **: 00:27:19.384: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported

** (gedit:5358): WARNING **: 00:27:21.787: Set document metadata failed: Setting attribute metadata::gedit-position not supported

(gedit:5358): dconf-WARNING **: 00:27:21.790: failed to commit changes to dconf: Could not connect: No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ grep arquivo.txt
```

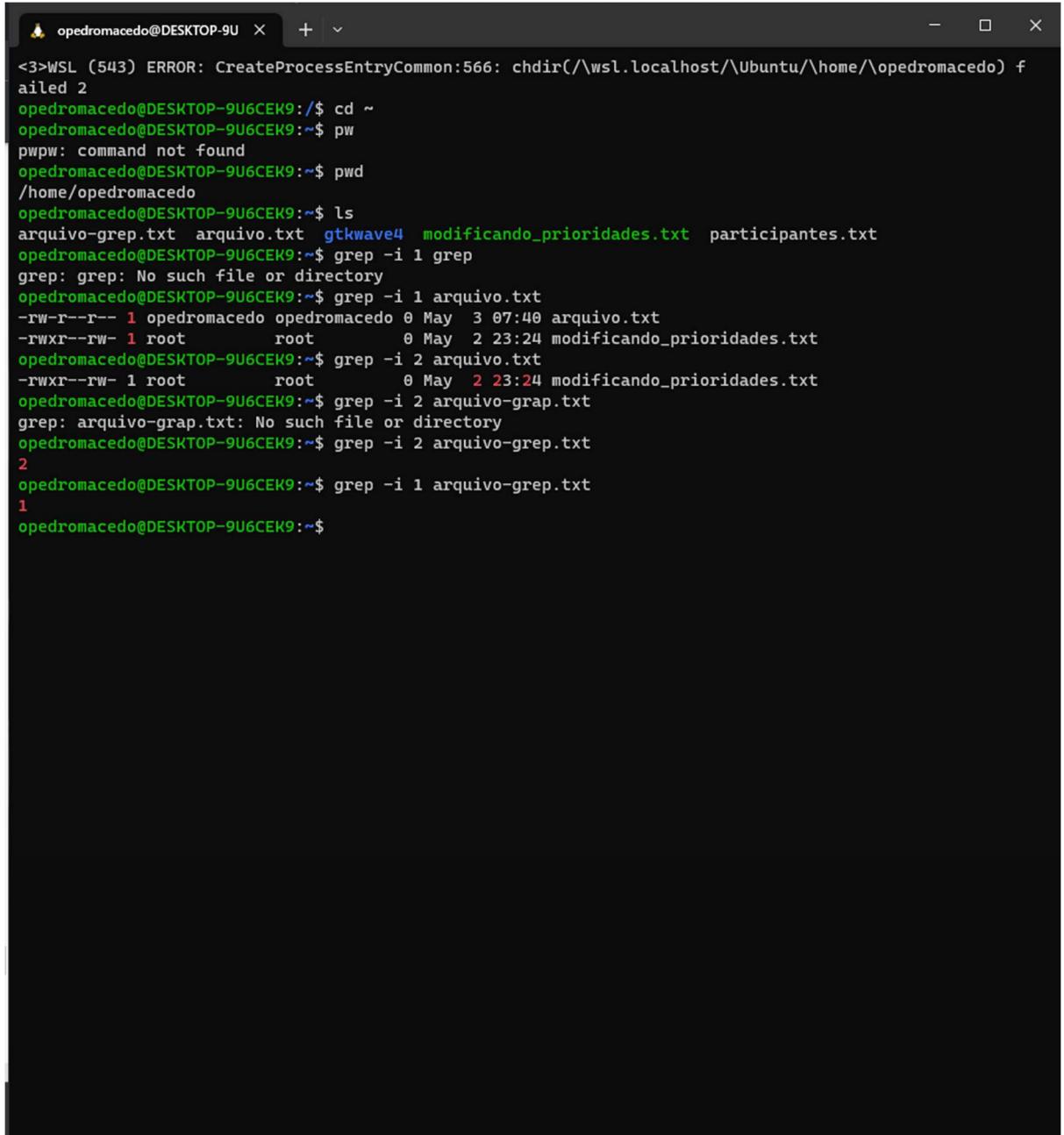
Fonte: Meu Terminal

Comando grep

Exercício: Crie um novo arquivo chamado "arquivo-grep.txt" e adicione algumas linhas de texto.

Em seguida, use o comando "grep" para buscar por um padrão no arquivo.

Figura 14: grep



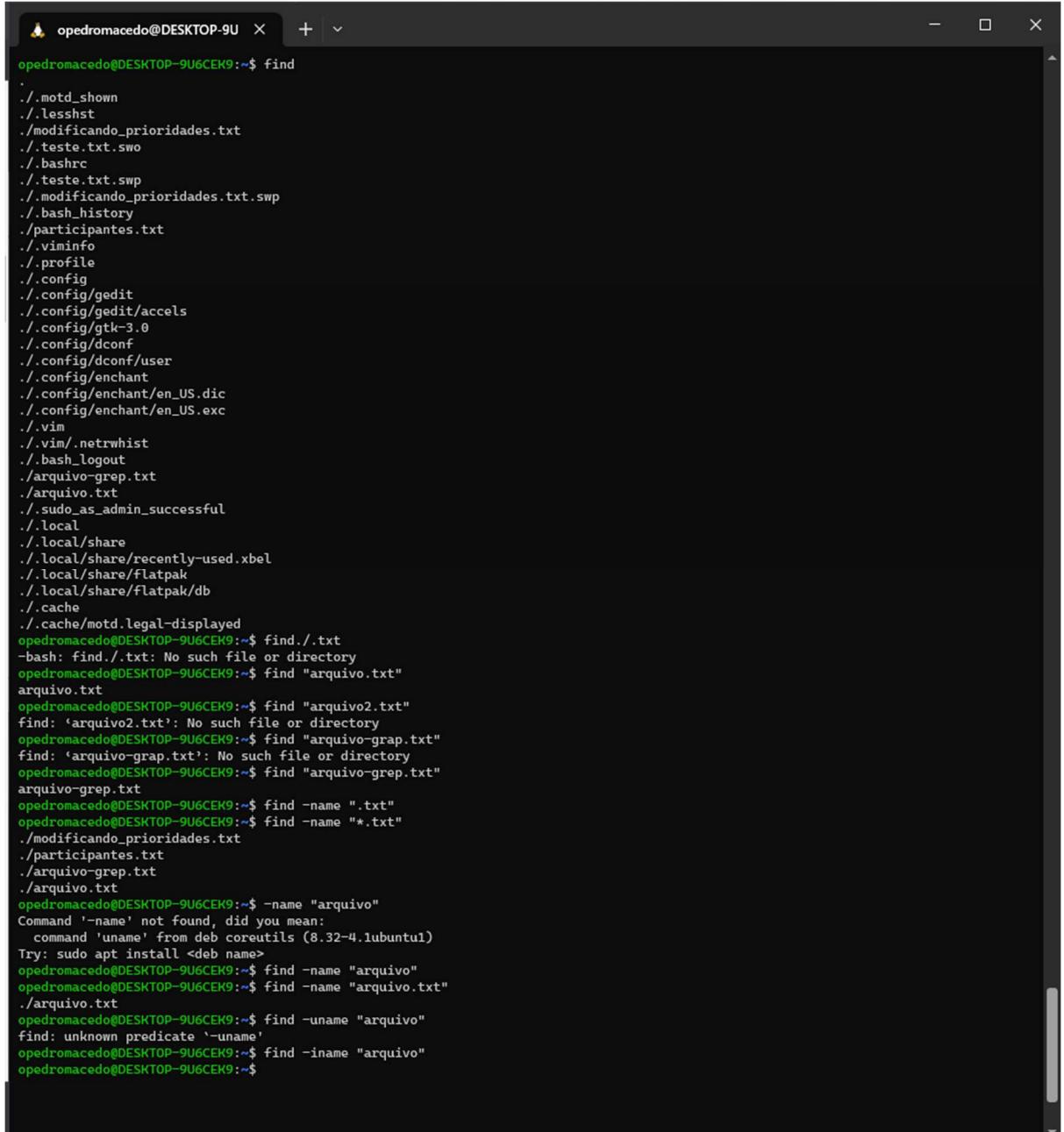
```
<3>WSL (543) ERROR: CreateProcessEntryCommon:566: chdir(/wsl.localhost/Ubuntu/home/opedromacedo) failed 2
opedromacedo@DESKTOP-9U6CEK9:/$ cd ~
opedromacedo@DESKTOP-9U6CEK9:~$ pw
pw: command not found
opedromacedo@DESKTOP-9U6CEK9:~$ pwd
/home/opedromacedo
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo-grep.txt arquivo.txt gtkwave4 modificando_prioridades.txt participantes.txt
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 1 grep
grep: grep: No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 1 arquivo.txt
-rw-r--r-- 1 opedromacedo opedromacedo 0 May  3 07:40 arquivo.txt
-rwxr--rw- 1 root      root        0 May  2 23:24 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 2 arquivo.txt
-rwxr--rw- 1 root      root        0 May  2 23:24 modificando_prioridades.txt
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 2 arquivo-grep.txt
grep: arquivo-grep.txt: No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 2 arquivo-grep.txt
2
opedromacedo@DESKTOP-9U6CEK9:~$ grep -i 1 arquivo-grep.txt
1
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando find

Exercício: Use o comando "find" para buscar por arquivos ou diretórios com base em critérios específicos.

Figura 15: Comando find



A screenshot of a terminal window titled "opedromacedo@DESKTOP-9U6CEK9:~\$". The window displays a series of commands and their outputs. The user runs "find .", which lists numerous files and directories in the current directory. Then, they run "find ./txt", which fails because there is no file named "txt". Next, they run "find "arquivo.txt"" and "find "arquivo2.txt"" both of which fail for the same reason. They then run "find -name *.txt", which finds all files ending in ".txt". Finally, they run "find -name arquivo", which triggers a command-line completion menu, and "find -name arquivo.txt", which successfully finds the file "arquivo.txt".

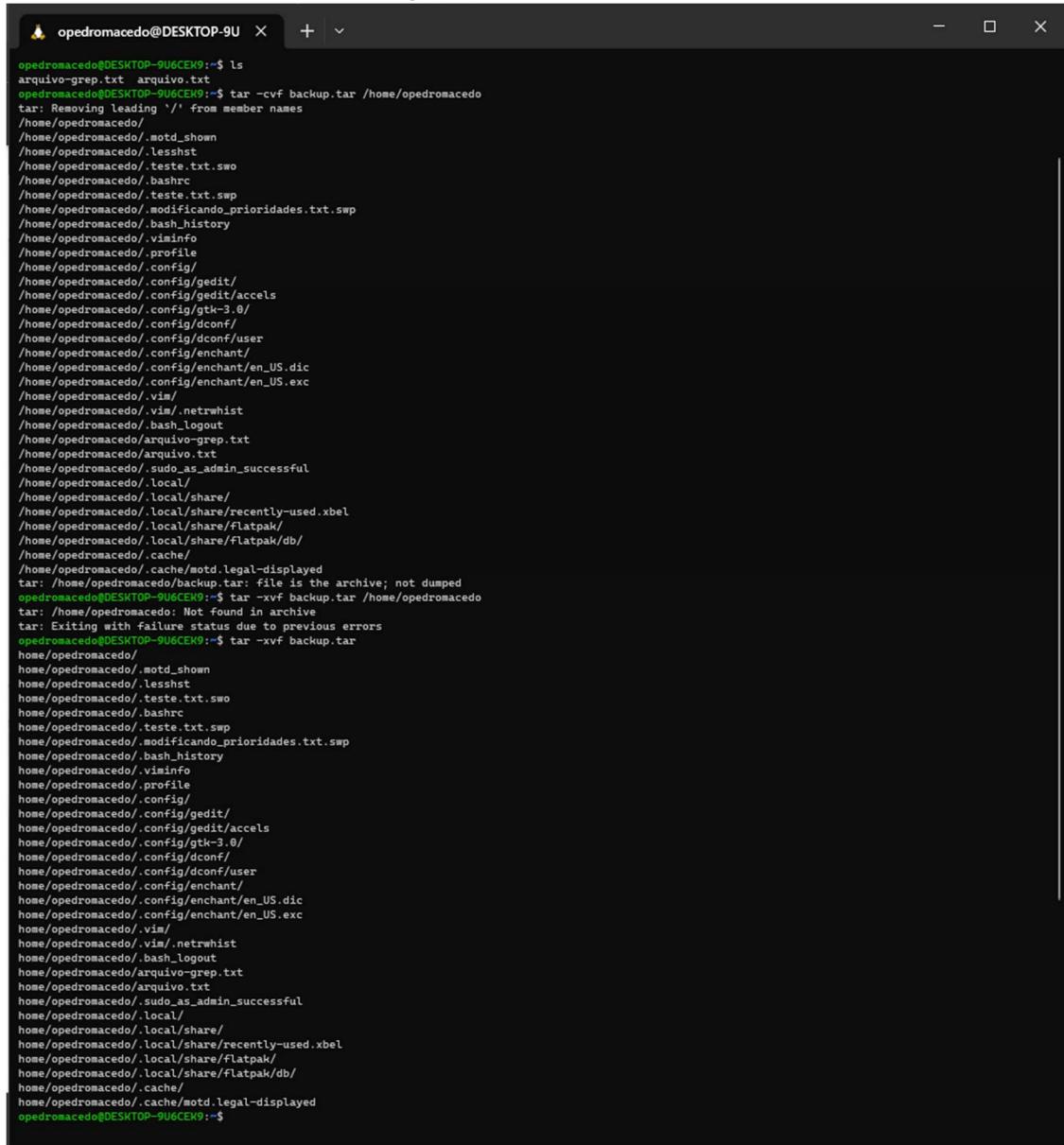
```
opedromacedo@DESKTOP-9U6CEK9:~$ find
.
./motd_shown
./lessht
./modificando_prioridades.txt
./teste.txt.swp
./bashrc
./.teste.txt.swp
./modificando_prioridades.txt.swp
./bash_history
./participantes.txt
./viminfo
./profile
./config
./config/gedit
./config/gedit/accecs
./config/gtk-3.0
./config/dconf
./config/dconf/user
./config/enchant
./config/enchant/en_US.dic
./config/enchant/en_US.exc
./vim
./vim/.netrwhist
./bash_logout
./arquivo-grep.txt
./arquivo.txt
./sudo_as_admin_successful
./local
./local/share
./local/share/recently-used.xbel
./local/share/flatpak
./local/share/flatpak/db
./cache
./cache/motd.legal-displayed
opedromacedo@DESKTOP-9U6CEK9:~$ find ./txt
-bash: find ./txt: No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ find "arquivo.txt"
arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ find "arquivo2.txt"
find: 'arquivo2.txt': No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ find "arquivo-grap.txt"
find: 'arquivo-grap.txt': No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ find "arquivo-grep.txt"
arquivo-grep.txt
opedromacedo@DESKTOP-9U6CEK9:~$ find -name ".txt"
opedromacedo@DESKTOP-9U6CEK9:~$ find -name "*.txt"
./modificando_prioridades.txt
./participantes.txt
./arquivo-grep.txt
./arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ -name "arquivo"
Command '-name' not found, did you mean:
  command 'uname' from deb coreutils (8.32-4.1ubuntu1)
Try: sudo apt install <deb name>
opedromacedo@DESKTOP-9U6CEK9:~$ find -name "arquivo"
opedromacedo@DESKTOP-9U6CEK9:~$ find -name "arquivo.txt"
./arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ find -uname "arquivo"
find: unknown predicate '-uname'
opedromacedo@DESKTOP-9U6CEK9:~$ find -iname "arquivo"
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando tar

Exercício: Crie um arquivo compactado "backup.tar" contendo todos os arquivos no diretório atual e, em seguida, extraia o arquivo compactado.

Figura 16: Comando tar



A screenshot of a terminal window titled "opedromacedo@DESKTOP-9U6CEK9:~". The terminal displays the following sequence of commands and their output:

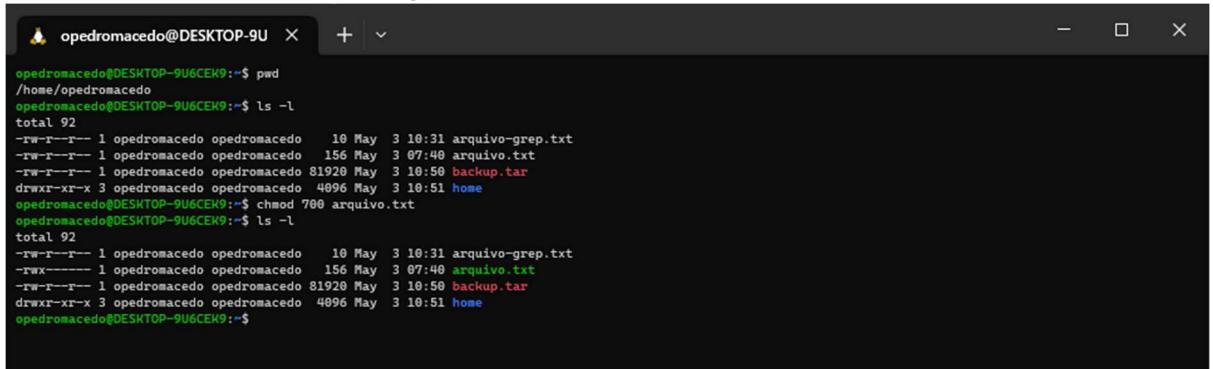
```
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo-grep.txt arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ tar -cvf backup.tar /home/opedromacedo
tar: Removing leading '/' from member names
/home/opedromacedo/
/home/opedromacedo/.motd_shown
/home/opedromacedo/.lessht
/home/opedromacedo/.teste.txt.swp
/home/opedromacedo/.bashrc
/home/opedromacedo/.teste.txt.swp
/home/opedromacedo/.modificando_prioridades.txt.swp
/home/opedromacedo/.bash_history
/home/opedromacedo/.viminfo
/home/opedromacedo/.profile
/home/opedromacedo/.config/
/home/opedromacedo/.config/gedit/
/home/opedromacedo/.config/gedit/acce
/home/opedromacedo/.config/gtk-3.8/
/home/opedromacedo/.config/dconf/
/home/opedromacedo/.config/dconf/user
/home/opedromacedo/.config/enchant/
/home/opedromacedo/.config/enchant/en_US.dic
/home/opedromacedo/.config/enchant/en_US.exc
/home/opedromacedo/.vim/
/home/opedromacedo/.vim/.netrwhist
/home/opedromacedo/.bash_logout
/home/opedromacedo/.arquivo-grep.txt
/home/opedromacedo/.arquivo.txt
/home/opedromacedo/.sudo_as_admin_successful
/home/opedromacedo/.local/
/home/opedromacedo/.local/share/
/home/opedromacedo/.local/share/recently-used.xbel
/home/opedromacedo/.local/share/flatpak/
/home/opedromacedo/.local/share/flatpak/db/
/home/opedromacedo/.cache/
/home/opedromacedo/.cache/motd.legal-displayed
tar: /home/opedromacedo/backup.tar: file is the archive; not dumped
opedromacedo@DESKTOP-9U6CEK9:~$ tar -xvf backup.tar /home/opedromacedo
tar: /home/opedromacedo: Not found in archive
tar: Exiting with failure status due to previous errors
opedromacedo@DESKTOP-9U6CEK9:~$ tar -xvf backup.tar
home/opedromacedo/
home/opedromacedo/.motd_shown
home/opedromacedo/.lessht
home/opedromacedo/.teste.txt.swp
home/opedromacedo/.bashrc
home/opedromacedo/.teste.txt.swp
home/opedromacedo/.modificando_prioridades.txt.swp
home/opedromacedo/.bash_history
home/opedromacedo/.viminfo
home/opedromacedo/.profile
home/opedromacedo/.config/
home/opedromacedo/.config/gedit/
home/opedromacedo/.config/gedit/acce
home/opedromacedo/.config/gtk-3.8/
home/opedromacedo/.config/dconf/
home/opedromacedo/.config/dconf/user
home/opedromacedo/.config/enchant/
home/opedromacedo/.config/enchant/en_US.dic
home/opedromacedo/.config/enchant/en_US.exc
home/opedromacedo/.vim/
home/opedromacedo/.vim/.netrwhist
home/opedromacedo/.bash_logout
home/opedromacedo/.arquivo-grep.txt
home/opedromacedo/.arquivo.txt
home/opedromacedo/.sudo_as_admin_successful
home/opedromacedo/.local/
home/opedromacedo/.local/share/
home/opedromacedo/.local/share/recently-used.xbel
home/opedromacedo/.local/share/flatpak/
home/opedromacedo/.local/share/flatpak/db/
home/opedromacedo/.cache/
home/opedromacedo/.cache/motd.legal-displayed
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando chmod

Exercício: Altere as permissões do arquivo "arquivo.txt" para que somente o proprietário tenha permissão de leitura, escrita e execução.

Figura 17: Comando chmod



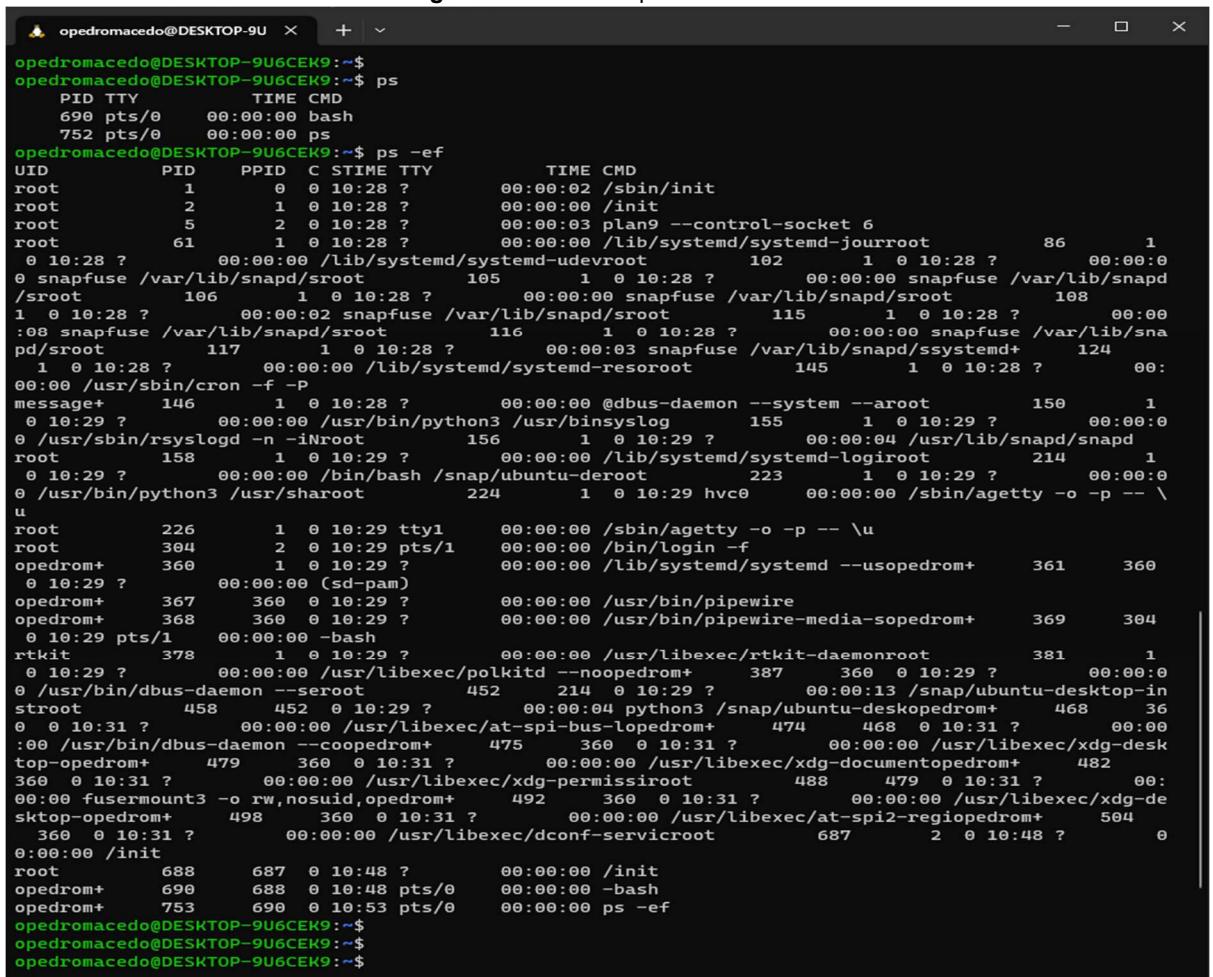
```
opedromacedo@DESKTOP-9U6CEK9:~$ pwd
/home/opedromacedo
opedromacedo@DESKTOP-9U6CEK9:~$ ls -l
total 92
-rw-r--r-- 1 opedromacedo opedromacedo 10 May 3 10:31 arquivo-grep.txt
-rw-r--r-- 1 opedromacedo opedromacedo 156 May 3 07:40 arquivo.txt
-rw-r--r-- 1 opedromacedo opedromacedo 81920 May 3 10:56 backup.tar
drwxr-xr-x 3 opedromacedo opedromacedo 4096 May 3 10:51 home
opedromacedo@DESKTOP-9U6CEK9:~$ chmod 700 arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls -l
total 92
-rw-r--r-- 1 opedromacedo opedromacedo 10 May 3 10:31 arquivo-grep.txt
-rwx----- 1 opedromacedo opedromacedo 156 May 3 07:40 arquivo.txt
-rw-r--r-- 1 opedromacedo opedromacedo 81920 May 3 10:56 backup.tar
drwxr-xr-x 3 opedromacedo opedromacedo 4096 May 3 10:51 home
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando ps

Exercício: Use o comando "ps" para listar os processos em execução no sistema.

Figura 18: Comando ps



```
opedromacedo@DESKTOP-9U6CEK9:~$ 
opedromacedo@DESKTOP-9U6CEK9:~$ ps
   PID TTY      TIME CMD
 690 pts/0    00:00:00 bash
 752 pts/0    00:00:00 ps
opedromacedo@DESKTOP-9U6CEK9:~$ ps -ef
UID        PID  PPID  C STIME TTY          TIME CMD
root         1     0 10:28 ?        00:00:02 /sbin/init
root         2     1 10:28 ?        00:00:00 /init
root         5     2 10:28 ?        00:00:03 plan9 --control-socket 6
root        61     1 10:28 ?        00:00:00 /lib/systemd/systemd-jourroot      86     1
root        61 10:28 ?        00:00:00 /lib/systemd/systemd-udevroot      102     1 0 10:28 ?        00:00:00
0 snapfuse /var/lib/snapd/sroot      105     1 0 10:28 ?        00:00:00 snapfuse /var/lib/snapd
/sroot      106     1 0 10:28 ?        00:00:00 snapfuse /var/lib/snapd/sroot      108
1 0 10:28 ?        00:00:02 snapfuse /var/lib/snapd/sroot      115     1 0 10:28 ?        00:00
:08 snapfuse /var/lib/snapd/sroot      116     1 0 10:28 ?        00:00:00 snapfuse /var/lib/snapd
pd/sroot      117     1 0 10:28 ?        00:00:03 snapfuse /var/lib/snapd/ssystemd+ 124
1 0 10:28 ?        00:00:00 /lib/systemd/systemd-resoroot      145     1 0 10:28 ?        00:
00:00 /usr/sbin/cron -f -P
message+    146     1 0 10:28 ?        00:00:00 @dbus-daemon --system --aroot      150     1
0 10:29 ?        00:00:00 /usr/bin/python3 /usr/bin/syslog      155     1 0 10:29 ?        00:00:0
0 /usr/sbin/rsyslogd -n -iNroot      156     1 0 10:29 ?        00:00:04 /usr/lib/snapd/snapd
root       158     1 0 10:29 ?        00:00:00 /lib/systemd/systemd-logiroot      214     1
0 10:29 ?        00:00:00 /bin/bash /snap/ubuntu-deroott      223     1 0 10:29 ?        00:00:0
0 /usr/bin/python3 /usr/share/root      224     1 0 10:29 hvc0    00:00:00 /sbin/agetty -o -p -- \
u
root       226     1 0 10:29 ttym1    00:00:00 /sbin/agetty -o -p -- \u
root       304     2 0 10:29 pts/1    00:00:00 /bin/login -f
opedrom+    360     1 0 10:29 ?        00:00:00 /lib/systemd/systemd --usopedrom+    361     360
0 10:29 ?        00:00:00 (sd-pam)
opedrom+    367     360 0 10:29 ?        00:00:00 /usr/bin/pipewire
opedrom+    368     360 0 10:29 ?        00:00:00 /usr/bin/pipewire-media-sopedrom+ 369     304
0 10:29 pts/1    00:00:00 -bash
rtkit      378     1 0 10:29 ?        00:00:00 /usr/libexec/rtkit-daemonroot      381     1
0 10:29 ?        00:00:00 /usr/libexec/polkitd --noopедром+ 387     360 0 10:29 ?        00:00:0
0 /usr/bin/dbus-daemon --seroot      452     214 0 10:29 ?        00:00:13 /snap/ubuntu-desktop-in
stroot      458     452 0 10:29 ?        00:00:04 python3 /snap/ubuntu-desktop-kopiedrom+ 468     36
0 0 10:31 ?        00:00:00 /usr/libexec/at-spi-bus-лопедром+ 474     468 0 10:31 ?        00:00
:00 /usr/bin/dbus-daemon --coopedrom+ 475     360 0 10:31 ?        00:00:00 /usr/libexec/xdg-desk
top-педром+ 479     360 0 10:31 ?        00:00:00 /usr/libexec/xdg-documentopедром+ 482
360 0 10:31 ?        00:00:00 /usr/libexec/xdg-permissiroot      488     479 0 10:31 ?        00:
00:00 fusermount3 -o rw,nosuid,opedrom+ 492     360 0 10:31 ?        00:00:00 /usr/libexec/xdg-de
sktop-opedrom+ 498     360 0 10:31 ?        00:00:00 /usr/libexec/at-spi2-regiopedrom+ 504
360 0 10:31 ?        00:00:00 /usr/libexec/dconf-servicoroot      687     2 0 10:48 ?        0
0:00:00 /init
root       688     687 0 10:48 ?        00:00:00 /init
opedrom+    690     688 0 10:48 pts/0    00:00:00 -bash
opedrom+    753     690 0 10:53 pts/0    00:00:00 ps -ef
opedromacedo@DESKTOP-9U6CEK9:~$ 
opedromacedo@DESKTOP-9U6CEK9:~$ 
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando top

Exercício: Use o comando "top" para monitorar os processos em execução no sistema.

Figura 17: Comando top

```
opedromacedo@DESKTOP-9U6CEK9:~$ top
Tasks: 47 total, 1 running, 46 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.1 sy, 0.0 ni, 99.9 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 1861.8 total, 943.5 free, 582.6 used, 415.6 buff/cache
MiB Swap: 1024.0 total, 1024.0 free, 0.0 used. 1213.3 avail Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
 754 opedrom+ 20 0 7896 3760 3088 R 0.3 0.2 0:00.08 top
    1 root 20 0 165992 11180 8188 S 0.0 0.6 0:02.64 systemd
    2 root 20 0 2324 1256 1148 S 0.0 0.1 0:00.27 init=systemd(Ub
    5 root 20 0 2368 68 68 S 0.0 0.0 0:03.07 init
   61 root 19 -1 47732 15548 14492 S 0.0 0.8 0:00.78 systemd-journal
   86 root 20 0 22088 6004 4440 S 0.0 0.3 0:00.70 systemd-udevd
  102 root 20 0 4492 160 16 S 0.0 0.0 0:00.01 snapfuse
  105 root 20 0 4492 1416 1176 S 0.0 0.1 0:00.44 snapfuse
  106 root 20 0 4624 160 8 S 0.0 0.0 0:00.01 snapfuse
  108 root 20 0 4792 1632 1180 S 0.0 0.1 0:02.33 snapfuse
  115 root 20 0 4808 1720 1132 S 0.0 0.1 0:08.71 snapfuse
  116 root 20 0 4492 152 0 S 0.0 0.0 0:00.00 snapfuse
  117 root 20 0 4768 1884 1416 S 0.0 0.1 0:03.71 snapfuse
  124 systemd+ 20 0 25260 12408 8468 S 0.0 0.7 0:00.74 systemd-resolve
  145 root 20 0 4304 2580 2332 S 0.0 0.1 0:00.02 cron
  146 message+ 20 0 8588 4568 4024 S 0.0 0.2 0:00.19 dbus-daemon
  150 root 20 0 35744 20892 11552 S 0.0 1.1 0:00.24 networkd-dispatcher
  155 syslog 20 0 222400 5148 4324 S 0.0 0.3 0:00.19 rsyslogd
  156 root 20 0 1897288 44648 16560 S 0.0 2.3 0:04.53 snapd
  158 root 20 0 15324 7324 6384 S 0.0 0.4 0:00.47 systemd-logind
  214 root 20 0 4780 3384 3144 S 0.0 0.2 0:00.39 subiquity-serve
  223 root 20 0 112916 22928 14272 S 0.0 1.2 0:00.28 unattended-upgrade
  224 root 20 0 3236 1056 964 S 0.0 0.1 0:00.04 getty
  226 root 20 0 3192 1112 1024 S 0.0 0.1 0:00.02 getty
  304 root 20 0 7520 4872 3960 S 0.0 0.3 0:00.07 login
  360 opedrom+ 20 0 17160 9548 7732 S 0.0 0.5 0:00.26 systemd
  361 opedrom+ 20 0 103368 3508 28 S 0.0 0.2 0:00.00 (sd-pam)
  367 opedrom+ 20 0 34384 6244 5116 S 0.0 0.3 0:00.23 pipewire
  368 opedrom+ 20 0 18276 6464 5360 S 0.0 0.3 0:00.22 pipewire-media-session
  369 opedrom+ 20 0 6120 4840 3280 S 0.0 0.3 0:00.09 bash
  378 rtkit 21 1 154000 1528 1308 S 0.0 0.1 0:00.09 rtkit-daemon
  381 root 20 0 235420 8184 6940 S 0.0 0.4 0:00.07 polkitd
  387 opedrom+ 20 0 8560 3940 3572 S 0.0 0.2 0:00.07 dbus-daemon
  452 root 20 0 597844 77368 23260 S 0.0 4.1 0:13.51 python3.10
  458 root 20 0 43232 37396 10100 S 0.0 2.0 0:04.80 python3
  468 opedrom+ 20 0 309460 7632 6984 S 0.0 0.4 0:00.01 at-spi-bus-launcher
  474 opedrom+ 20 0 8296 3940 3572 S 0.0 0.2 0:00.05 dbus-daemon
  475 opedrom+ 20 0 396748 14500 10676 S 0.0 0.8 0:00.06 xdg-desktop-por
  479 opedrom+ 20 0 531736 10688 6004 S 0.0 0.6 0:00.01 xdg-document-provider
  482 opedrom+ 20 0 230980 5848 5360 S 0.0 0.3 0:00.00 xdg-permission-provider
  488 root 20 0 2792 1020 932 S 0.0 0.1 0:00.00 fusermount3
```

Fonte: Meu Terminal

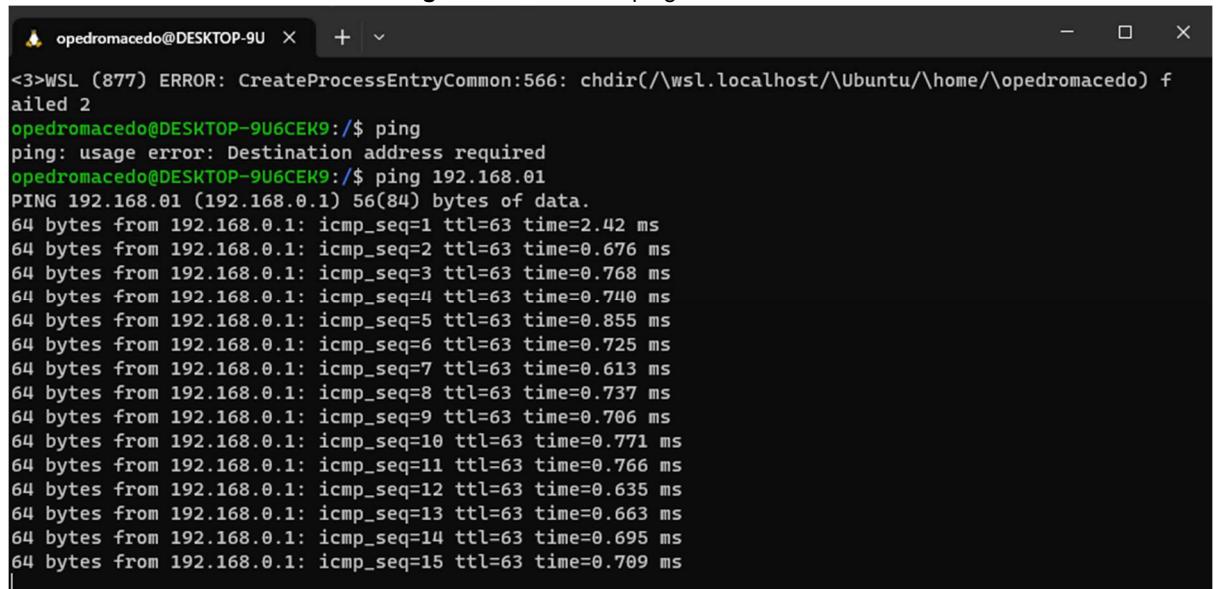
Comando curl

Exercício: Use o comando "curl" para baixar um arquivo do servidor e salvá-lo no diretório atual.

Comando ping

Exercício: Use o comando "ping" para testar a conectividade com outro computador na rede.

Figura 18: Comando ping



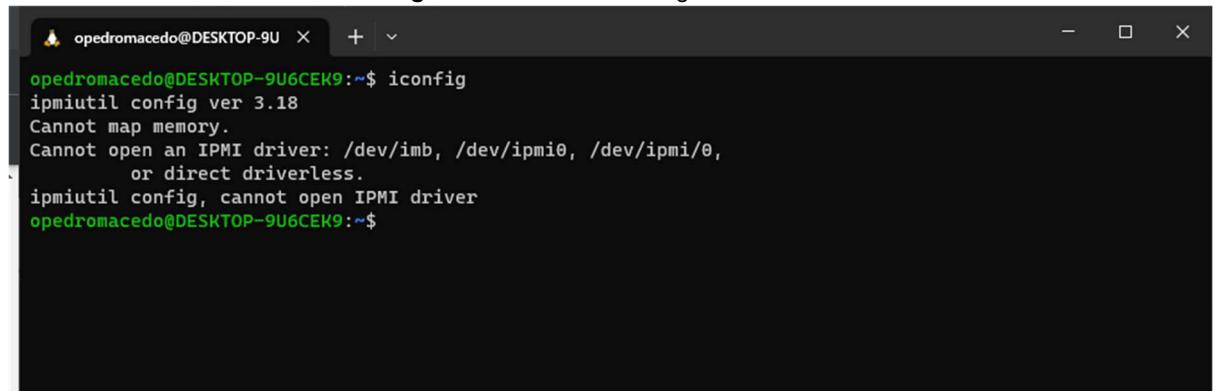
```
<3>WSL (877) ERROR: CreateProcessEntryCommon:566: chdir(/wsl.localhost/Ubuntu/home/opedromacedo) failed 2
opedromacedo@DESKTOP-9U6CEK9:~$ ping
ping: usage error: Destination address required
opedromacedo@DESKTOP-9U6CEK9:~$ ping 192.168.0.1
PING 192.168.0.1 (192.168.0.1) 56(84) bytes of data.
64 bytes from 192.168.0.1: icmp_seq=1 ttl=63 time=2.42 ms
64 bytes from 192.168.0.1: icmp_seq=2 ttl=63 time=0.676 ms
64 bytes from 192.168.0.1: icmp_seq=3 ttl=63 time=0.768 ms
64 bytes from 192.168.0.1: icmp_seq=4 ttl=63 time=0.740 ms
64 bytes from 192.168.0.1: icmp_seq=5 ttl=63 time=0.855 ms
64 bytes from 192.168.0.1: icmp_seq=6 ttl=63 time=0.725 ms
64 bytes from 192.168.0.1: icmp_seq=7 ttl=63 time=0.613 ms
64 bytes from 192.168.0.1: icmp_seq=8 ttl=63 time=0.737 ms
64 bytes from 192.168.0.1: icmp_seq=9 ttl=63 time=0.706 ms
64 bytes from 192.168.0.1: icmp_seq=10 ttl=63 time=0.771 ms
64 bytes from 192.168.0.1: icmp_seq=11 ttl=63 time=0.766 ms
64 bytes from 192.168.0.1: icmp_seq=12 ttl=63 time=0.635 ms
64 bytes from 192.168.0.1: icmp_seq=13 ttl=63 time=0.663 ms
64 bytes from 192.168.0.1: icmp_seq=14 ttl=63 time=0.695 ms
64 bytes from 192.168.0.1: icmp_seq=15 ttl=63 time=0.709 ms
```

Fonte: Meu Terminal

Comando ifconfig

Exercício: Use o comando "ifconfig" para exibir informações sobre as interfaces de rede do sistema.

Figura 19: Comando ifconfig



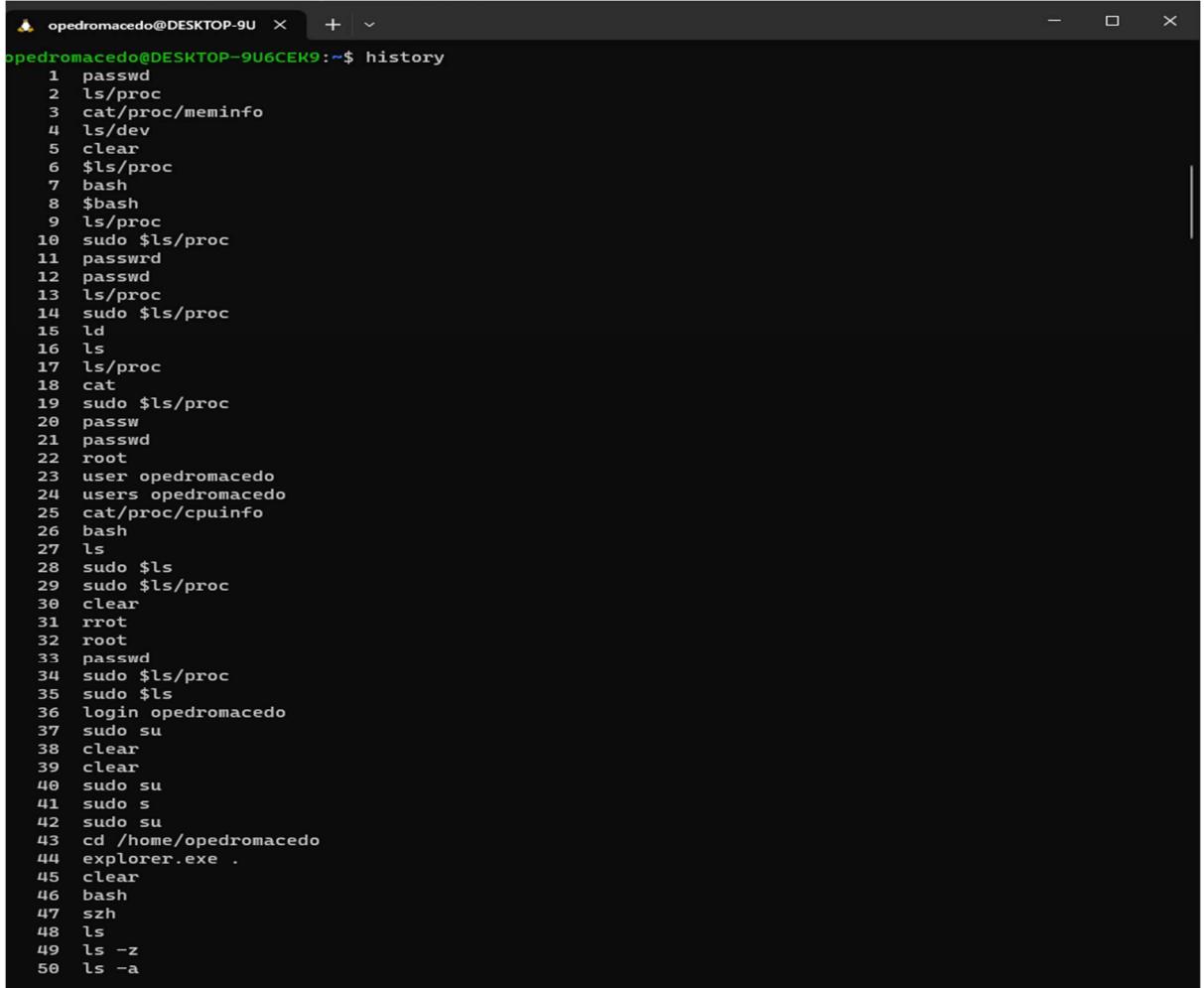
```
<3>WSL (877) ERROR: CreateProcessEntryCommon:566: chdir(/wsl.localhost/Ubuntu/home/opedromacedo) failed 2
opedromacedo@DESKTOP-9U6CEK9:~$ ifconfig
ipmiutil config ver 3.18
Cannot map memory.
Cannot open an IPMI driver: /dev/imb, /dev/ipmi0, /dev/ipmi/0,
        or direct driverless.
ipmiutil config, cannot open IPMI driver
opedromacedo@DESKTOP-9U6CEK9:~$
```

Fonte: Meu Terminal

Comando history

Exercício: Use o comando "history" para exibir o histórico de comandos executados no terminal.

Figura 20: Comando history



```
opedromacedo@DESKTOP-9U6CEK9:~$ history
1  passwd
2  ls/proc
3  cat/proc/meminfo
4  ls/dev
5  clear
6  $ls/proc
7  bash
8  $bash
9  ls/proc
10 sudo $ls/proc
11 passwd
12 passwd
13 ls/proc
14 sudo $ls/proc
15 ld
16 ls
17 ls/proc
18 cat
19 sudo $ls/proc
20 passw
21 passwd
22 root
23 user opedromacedo
24 users opedromacedo
25 cat/proc/cpuinfo
26 bash
27 ls
28 sudo $ls
29 sudo $ls/proc
30 clear
31 rrot
32 root
33 passwd
34 sudo $ls/proc
35 sudo $ls
36 login opedromacedo
37 sudo su
38 clear
39 clear
40 sudo su
41 sudo s
42 sudo su
43 cd /home/opedromacedo
44 explorer.exe .
45 clear
46 bash
47 szh
48 ls
49 ls -z
50 ls -a
```

Fonte: Meu Terminal

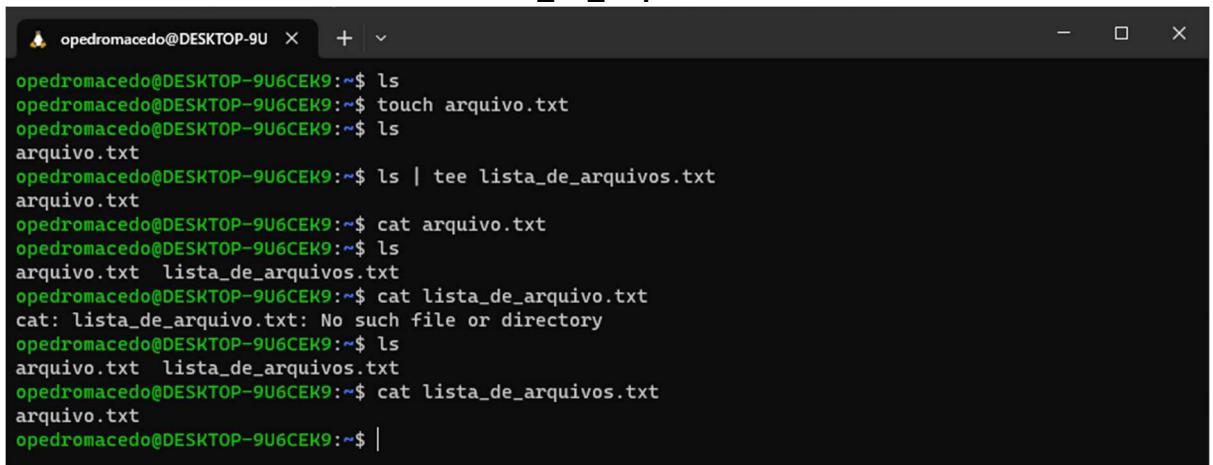
Pipes e Redirecionamentos

Comando Pipe

Exercício: Use um pipe para redirecionar a saída do comando "ls" para o comando "grep" e buscar por um padrão. Em seguida, use o redirecionamento de saída padrão para salvar o resultado em um arquivo.

Comando TEE

Exercício: Use o comando "ls | tee lista_de_arquivos.txt" para listar todos os arquivos e diretórios no diretório atual e salvar a saída em um arquivo chamado "lista_de_arquivos.txt".



```
opedromacedo@DESKTOP-9U6CEK9:~$ ls
opedromacedo@DESKTOP-9U6CEK9:~$ touch arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls | tee lista_de_arquivos.txt
arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ cat arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo.txt lista_de_arquivos.txt
opedromacedo@DESKTOP-9U6CEK9:~$ cat lista_de_arquivo.txt
cat: lista_de_arquivo.txt: No such file or directory
opedromacedo@DESKTOP-9U6CEK9:~$ ls
arquivo.txt lista_de_arquivos.txt
opedromacedo@DESKTOP-9U6CEK9:~$ cat lista_de_arquivos.txt
arquivo.txt
opedromacedo@DESKTOP-9U6CEK9:~$ |
```