Linux Laboratory

ENSC3130
Project 1
Automated Linux/Unix Command
Manual Generation

Prepared by:

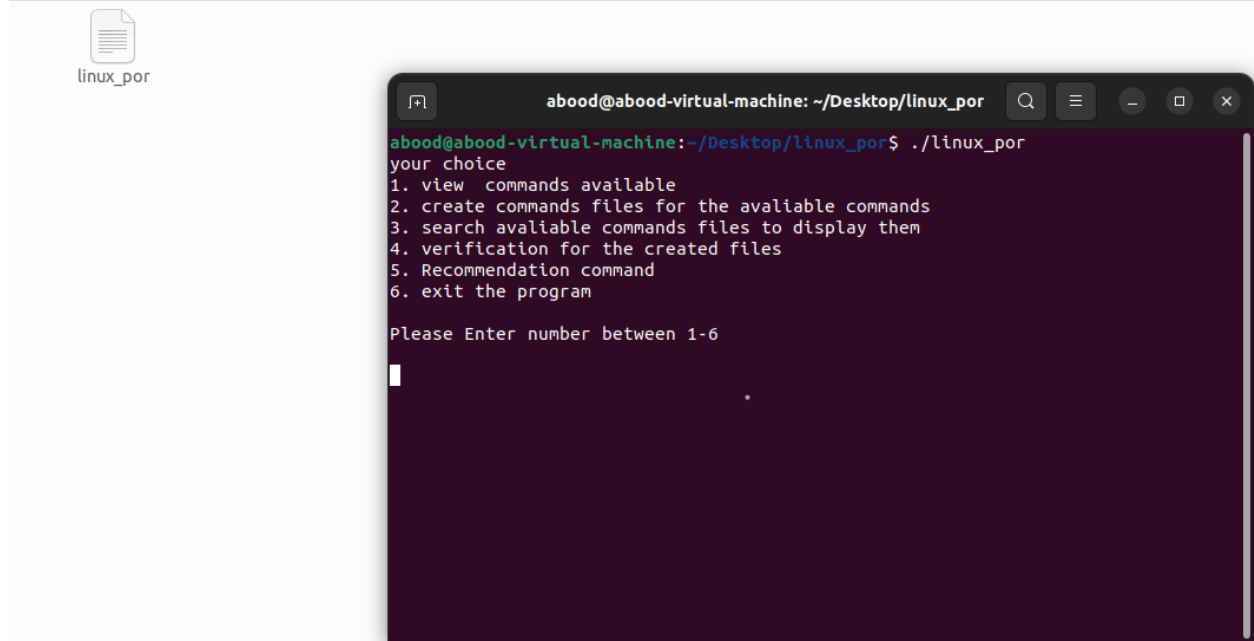Abdelrhman Abed   1193191

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Section: 4

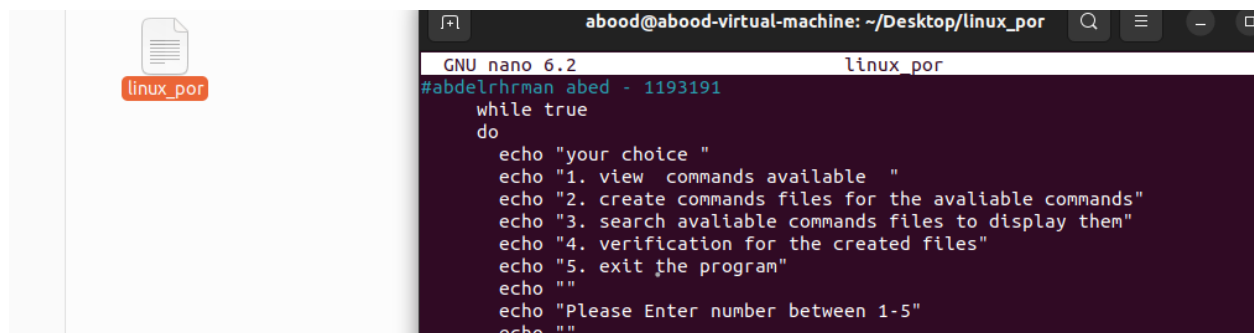**Date:** 3 /1/2024

Program Interface:

The user have 6 choices from 1-6 and each choice give different result as shown below when enter number 6 it is exit form program

Note: I using case statement in this code
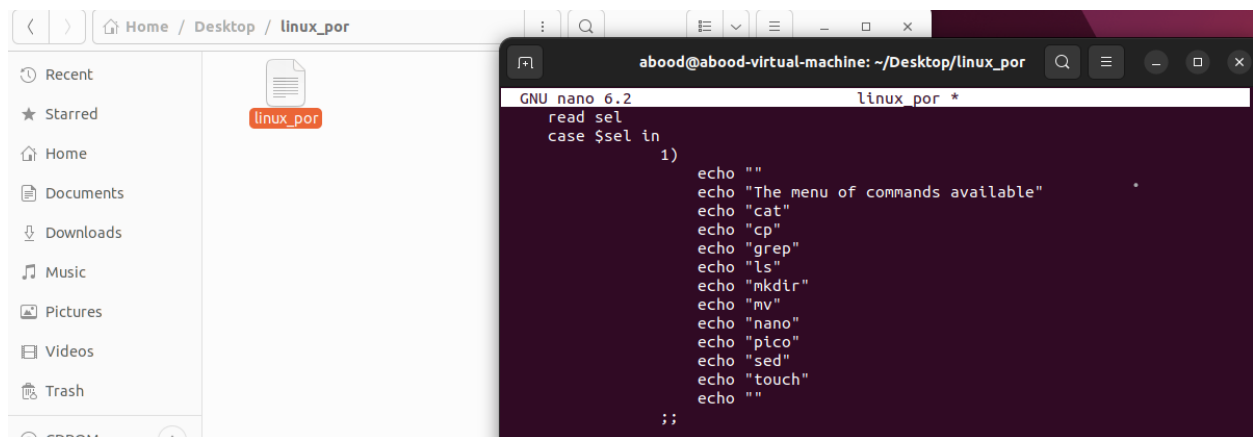
The Code:

View commands available:

When the first choice is picked by entering 1 (view command available) it will give this result menu of commands (cat , cp , grep , ls ,mkdir ,mv ,nano ,pico ,sed ,touch)

The Code:

Create command files:


```
your choice
1. view  commands available
2. create commands files for the avaliable commands
3. search avaliable commands files to display them
4. verification for the created files
5. Recommendation command
6. exit the program

Please Enter number between 1-6

2
creation for command files done
-------------------------------------------------------------------
your choice
1. view  commands available
2. create commands files for the avaliable commands
3. search avaliable commands files to display them
4. verification for the created files
5. Recommendation command
6. exit the program

Please Enter number between 1-6
```

When the second choice is picked by entering 2 it will create file.txt for each command and insert in each file.txt (Command Description , Version , Example, Related, Note)
The operation is done automatically

4

Search

```
Please Enter number between 1-5

3
Enter the command name to search:
enter 0 if you want back to meun
```

When the Third choice is picked by entering 3 you will get a message (enter name command to search) and (enter 0 if you and back)

```
Enter the command name to search:
enter 0 if you want back to meun
s
commands that have s
    1   ls
    2   sed
```

Here the user can search for a word or litter for example by writing s the program will show the commands have letter s and the user must write the full name of command to display what is in file.txt to aplly the command

```
     2  sed
Enter the command name to search:
enter 0 if you want back to meun
sed
-------------------------------------------------------------
Description for sed command:
DESCRIPTION
       Sed  is a stream editor.  A stream editor is used to perform basic text
       transformations on an input stream (a file or input from  a  pipeline).
       While  in  some  ways similar to an editor which permits scripted edits
       (such as ed), sed works by making only one pass over the input(s),  and
       is consequently more efficient.  But it is sed's ability to filter text
-------------------------------------------------------------
The Version for sed command:
sed (GNU sed) 4.8
Packaged by Debian
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Jay Fenlason, Tom Lord, Ken Pizzini,
Paolo Bonzini, Jim Meyering, and Assaf Gordon.
```

When user write the name of the wanted command the program will display what is in file.txt to commad txt (Command Description , Version , Example, Related, Note)

```
Enter the command name to search:
enter 0 if you want back to meun
q
commands that have q
No matching command found have q
Do you want to display the suggested command (yes/no)?
```

When user enter or write an unavailable word or latter , do you want to display the suggested command (yes/no) will be given

```
commands that have q
No matching command found have q
Do you want to display the suggested command (yes/no)?
yes

cat
cp
grep
ls                                                            .
mkdir
mv
nano
pico
sed
touch

Enter the command name to search:
enter 0 if you want back to meun
```

By answering yes you will get a suggested command but if you chose no you can change the search contact

Verification
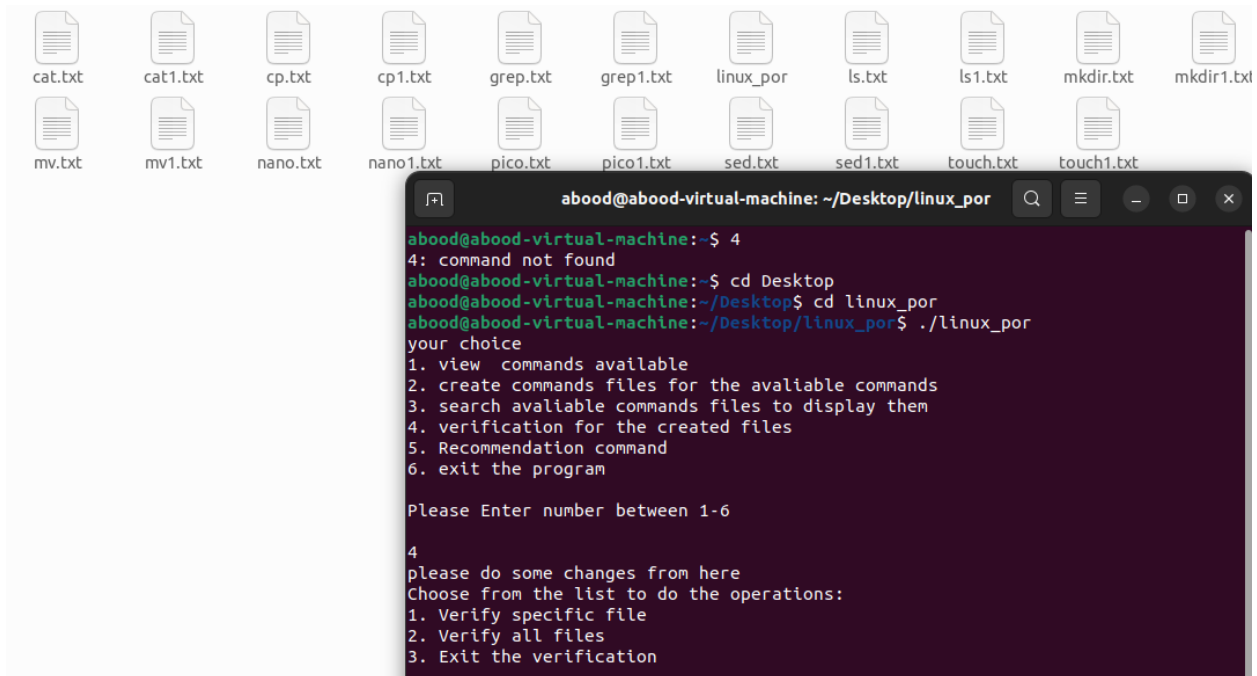
When the ford choice is picked by entering 4 menu for verification and will make file1.txt and copy data from file.txt to file1.txt So that we can do a comparison between file.txt and file1.txt in case 1 the verify file and 2 the verify all files
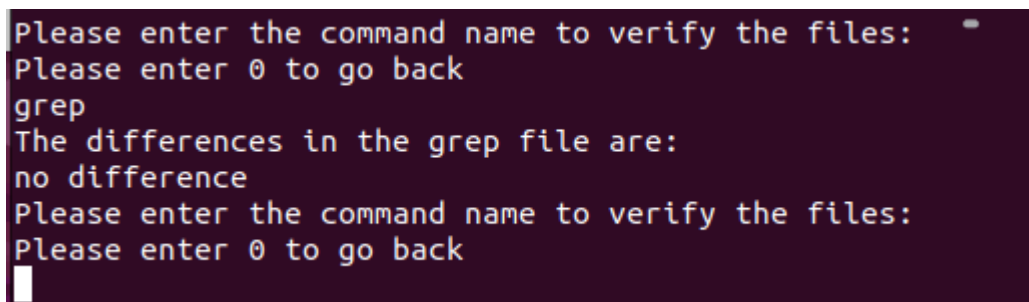
```
Choose from the list to do the operations:
1. Verify specific file
2. Verify all files
3. Exit the verification
2
The changes in the cat file are:
no difference
The changes in the cp file are:
no difference
The changes in the pico file are:
no difference
The changes in the nano file are:
no difference
The changes in the mkdir file are:
no difference
The changes in the grep file are:
no difference
The changes in the mv file are:
no difference
The changes in the ls file are:
no difference
The changes in the touch file are:
no difference
The changes in the sed file are:
no difference
```

No difference because I don't change in thing in original file

Open ⌄	⊡	mv.txt ~/Desktop/linux_por	Save	☰	—	◻	✕

grep.txt	✕	mv.txt	✕

```
3
4       Mandatory   arguments   to   long   options are mandatory for short options
5       too.
6
7       --backup[=CONTROL]
8 -----------------------------------------------------------------------------
9 The Version for nano command:
10 mv (GNU coreutils) 8.32
11 Copyright (C) 2020 Free Software Foundation, Inc.
12 License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
13 This is free software: you are free to change and redistribute it.
14 There is NO WARRANTY, to the extent permitted by law.
15
16 Written by Mike Parker, David MacKenzie, and Jim Meyering.
17 -----------------------------------------------------------------------------
18 Example for mv command:
19 mv file.txt file1 .txt or mv oldfile.txt new file.txt renames oldfile.txt to
20 newfile.txt using ls and grep 'f' to display what is in file The output:
21 oldfile.txt
22 after using mv
23 newfile.txt
24 -----------------------------------------------------------------------------
25 Related for mv command:
26 cp , rm
27 -----------------------------------------------------------------------------
28 Note for mv command:
29 command can be powerful tool for managing files and directories its moving or
30 mv.txt renaming files
31 -----------------------------------------------------------------------------
32 abood
```

```
                                    grep.txt
  3
  4        Mandatory  arguments  to  long  options are mandatory for sh
  5        too.
  6
  7        --backup[=CONTROL]
  8 ------------------------------------------------------------------
  9 The Version for nano command:
 10 mv (GNU coreutils) 8.32
 11 Copyright (C) 2020 Free Software Foundation, Inc.
 12 License GPLv3+: GNU GPL version 3 or later <https://gnu.org/license
 13 This is free software: you are free to change and redistribute it.
 14 There is NO WARRANTY, to the extent permitted by law.
 15
 16 Written by Mike Parker, David MacKenzie, and Jim Meyering.
 17 ------------------------------------------------------------------
 18 Example for mv command:
 19 mv file.txt file1 .txt or mv oldfile.txt new file.txt renames oldfi
 20 newfile.txt using ls and grep 'f' to display what is in file The ou
 21 oldfile.txt
 22 after using mv
 23 newfile.txt
 24 ------------------------------------------------------------------
 25 Related for mv command:
 26 cp , rm
 27 ------------------------------------------------------------------
 28 Note for mv command:
 29 command can be powerful tool for managing files and directories its moving or
 30 mv.txt renaming files
 31 ------------------------------------------------------------------
 32 abood
```

```
no difference
The changes in the mv file are:
no difference
The changes in the ls file are:
no difference
The changes in the touch file are:
no difference
The changes in the sed file are:
no difference
Choose from the list to do the operations:
1. Verify specific file
2. Verify all files
3. Exit the verification
1
Please enter the command name to verify the files:
Please enter 0 to go back
mv
The differences in the mv file are:
Files mv.txt and mv1.txt differ
32d31
< abood
Please enter the command name to verify the files:
Please enter 0 to go back
```

```
The changes in the cat file are:
no difference
The changes in the cp file are:
no difference
The changes in the pico file are:
no difference
The changes in the nano file are:
no difference
The changes in the mkdir file are:
no difference
The changes in the grep file are:
no difference
The changes in the mv file are:
Files mv.txt and mv1.txt differ
32d31
< abood
The changes in the ls file are:
no difference
The changes in the touch file are:
no difference
The changes in the sed file are:
no difference
```

When change in file1.txt and run the code the code will show the difference and what the difference and any line and column

Note: I using case statement in this code

Recommendation

```
The most Commands i use in program

./linux_por
chmod
nano
cd
ls
man
./newl
chmod
sh
clear
rm
cd
cat
history
cat
man
history
1
touch
man

choice the command to display:
enter 0 if you want back to meun
```

When the 5 choice is picked by entering 5 will display a most command I used in program you can make search here also if you enter name command not available the a message show command not available you can used a commands (cat , cp , grep , ls ,mkdir ,mv ,nano ,pico ,sed ,touch) to display (Command Description , Version , Example, Related, Note)

```
The most Commands i use in program

./linux_por
chmod
nano
cd
ls
man
clear
./newl
chmod
sh
cd
rm
cat
history
cat
man
history
1
touch
man

choice the command to display:
enter 0 if you want back to meun
history

command not available history
The command available to Display cat /cp /nano/pico/grep/mv/mkdir/sed/touch/ls
choice the command to display:
enter 0 if you want back to meun
```