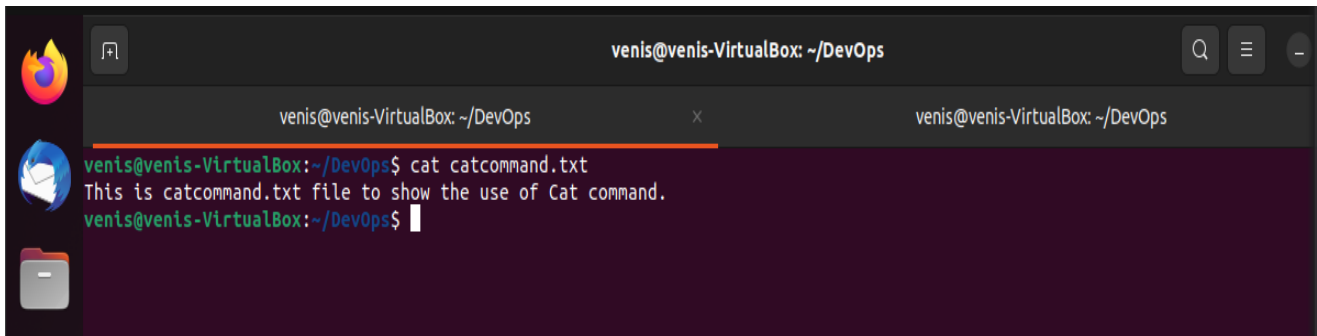


TASK 1

A. Task : Display the contents of a text file - Use commands like *cat* , *less* , or *more* to view the content of a text file. Describe the differences between these commands and identify scenarios where each is preferable.

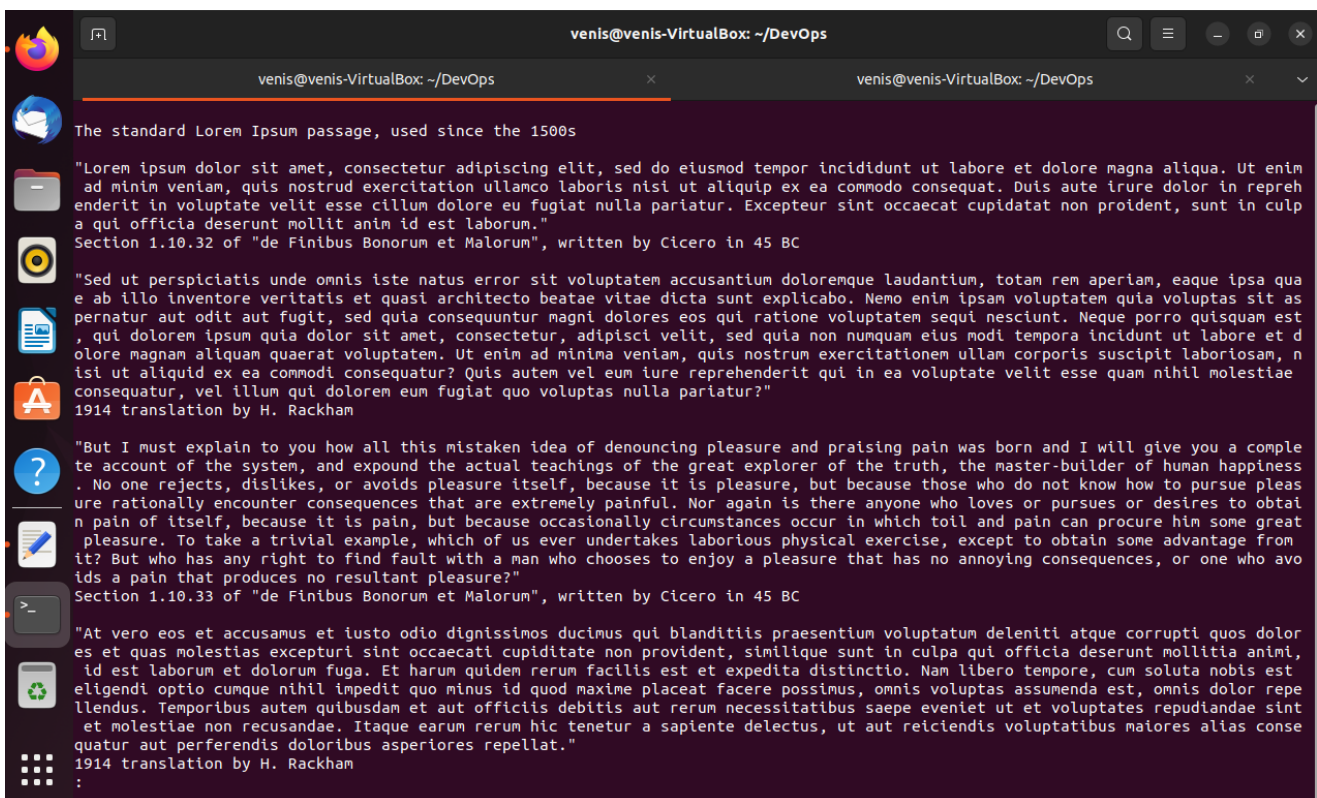
1. Cat : The cat command in Linux is used to concatenate and display the content of files. However, its primary purpose is to concatenate and display the content of files, but it can also be used to create new files, append content to existing files, and concatenate multiple files.



```
venis@venis-VirtualBox: ~/DevOps
venis@venis-VirtualBox:~/DevOps$ cat catcommand.txt
This is catcommand.txt file to show the use of Cat command.
venis@venis-VirtualBox:~/DevOps$
```

Use cases : ‘Cat’ command is used when we want to display small size files.

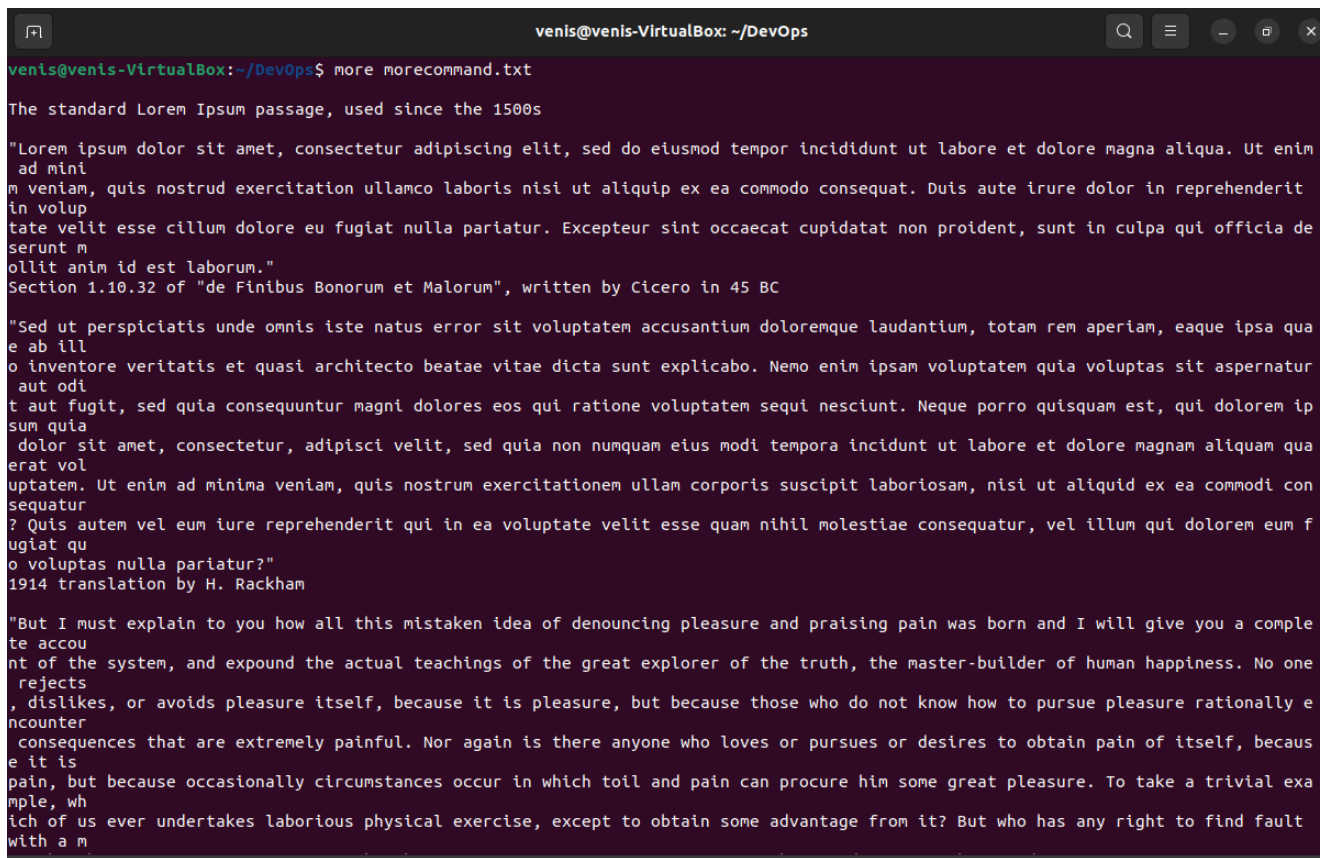
2. Less : It is used to view the contents of a text file one screen at a time .It provides a way to navigate through the file and search for specific content. Here are some basic uses of the less command .



```
venis@venis-VirtualBox: ~/DevOps
venis@venis-VirtualBox:~/DevOps$ less catcommand.txt
The standard Lorem Ipsum passage, used since the 1500s
"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in repreh
enderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culp
a qui officia deserunt mollit anim id est laborum."
Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC
"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa qua
e ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit as
pernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est
, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et d
olore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, n
isi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae
consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?"
1914 translation by H. Rackham
"But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a comple
te account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness
. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleas
ure rationally encounter consequences that are extremely painful. Nor again is there anyone who loves or pursues or desires to obtai
n pain of itself, because it is pain, but because occasionally circumstances occur in which toil and pain can procure him some great
pleasure. To take a trivial example, which of us ever undertakes laborious physical exercise, except to obtain some advantage from
it? But who has any right to find fault with a man who chooses to enjoy a pleasure that has no annoying consequences, or one who avo
ids a pain that produces no resultant pleasure?"
Section 1.10.33 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC
"At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolor
es et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi,
id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est
eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repe
llendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint
et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias conse
quatur aut perferendis doloribus asperiores repellat."
1914 translation by H. Rackham
;
```

Use Cases: `less` command is used for large files when you need to navigate interactively.

3. More : It is used to display the contents of a text file one screen at a time .



```
venis@venis-VirtualBox: ~/DevOps
venis@venis-VirtualBox:~/DevOps$ more morecommand.txt

The standard Lorem Ipsum passage, used since the 1500s

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim
ad mini
m veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit
in volup
tate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia de
serunt m
ollit anim id est laborum."
Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC

"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa qua
e ab ill
o inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur
aut odi
t aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ip
sum quia
dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam qua
erat vol
uptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi con
sequatur
? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum f
ugiat qu
o voluptas nulla pariatur?"
1914 translation by H. Rackham

"But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a comple
te accou
nt of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one
rejects
, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally e
ncounter
consequences that are extremely painful. Nor again is there anyone who loves or pursues or desires to obtain pain of itself, becaus
e it is
pain, but because occasionally circumstances occur in which toil and pain can procure him some great pleasure. To take a trivial exa
mple, wh
ich of us ever undertakes laborious physical exercise, except to obtain some advantage from it? But who has any right to find fault
with a m
```

Use Cases : 'More' command is used to view text files in command prompt , displaying one screen at a time in case the file is large .

B. Task: Display a specific range of lines from a text file - Use the appropriate options with *Cat* , *sed* or *awk* to display a specific range of lines from a text file .

1.Cat : Cat command is used to display lines 5 through 8 from lesscommand.txt file .

```
venis@venis-VirtualBox:~/DevOps$ cat lesscommand.txt | head -n 8 | tail -n +5
Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC

"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?"
1914 translation by H. Rackham
venis@venis-VirtualBox:~/DevOps$
```

2.awk : awk is programming language for scanning pattern and text processing.
e.g., command for displaying lines from 2 to 5 from lesscommand.txt.

```
venis@venis-VirtualBox: ~/DevOps
venis@venis-VirtualBox:~/DevOps$ awk '2 <= NR && NR <= 5' lesscommand.txt
The standard Lorem Ipsum passage, used since the 1500s

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."
Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC
venis@venis-VirtualBox:~/DevOps$
```

3.sed : sed is stream editor for filtering and transforming text.

e.g., command for displaying lines from 1 to 5 from lesscommand.txt.

```
venis@venis-VirtualBox: ~/DevOps
venis@venis-VirtualBox:~/DevOps$ sed -n '1,5p' lesscommand.txt
The standard Lorem Ipsum passage, used since the 1500s

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."
Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC
venis@venis-VirtualBox:~/DevOps$
```