

1. I am using ubuntu version 20.04 through virtual box, and the default desktop environment is called Gnome. The default editor that gnome uses is called Gedit. Gedit can be used by typing command gedit to the terminal, or manually by opening the text editor by searching gedit/text editor from the desktop.
2. I was unable to test the command in assignment 2, so I had to test out ssh connection by setting up my own Github account and connecting it with my ubuntu.

```
eemil@eemil-VirtualBox:~$ ssh -T git@github.com
Hi EemilAsp! You've successfully authenticated, but GitHub does not provide shell access.
eemil@eemil-VirtualBox:~$
```

Currently I am connected to my github and I am able to transfer data between my local and remote system (ubuntu / github).

3.

```
eemil@eemil-VirtualBox:~$ echo $SHELL
/bin/bash
eemil@eemil-VirtualBox:~$ echo \ $SHELL
$SHELL
eemil@eemil-VirtualBox:~$ echo \\ $SHELL
\\ /bin/bash
eemil@eemil-VirtualBox:~$ echo \\ $SHELL
\\ $SHELL
eemil@eemil-VirtualBox:~$ echo '\$'
\$
eemil@eemil-VirtualBox:~$ echo \
\
eemil@eemil-VirtualBox:~$ echo \
\\
eemil@eemil-VirtualBox:~$ echo "\$ "
$
eemil@eemil-VirtualBox:~$ echo '$'
"$ "
eemil@eemil-VirtualBox:~$ echo "$ "
$
eemil@eemil-VirtualBox:~$
```

4.

```
eemil@eemil-VirtualBox:~$ chmod +x myshell.sh
eemil@eemil-VirtualBox:~$ ./myshell.sh hello world whats up
./myshell.sh
hello
world
whats
up
eemil@eemil-VirtualBox:~$
```

```
1 #!/bin/bash
2
3 echo $0
4 for i; do
5     echo $i
6 done
```

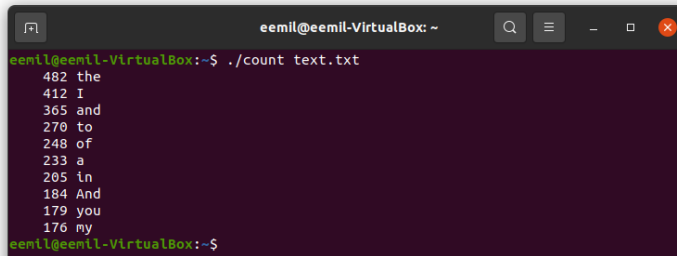
5.

```
1 #!/bin/bash
2
3
4 if [ "$#" -eq "0" ]
5 then
6     echo "usage: search_page command"
7 else
8     find /usr/share/man -name "$1*" -print
9 fi
10
```

```
eemil@eemil-VirtualBox:~$ ./search_page printf
/usr/share/man/man1/printf.1.gz
/usr/share/man/man3/printf.3.gz
eemil@eemil-VirtualBox:~$
```

6.

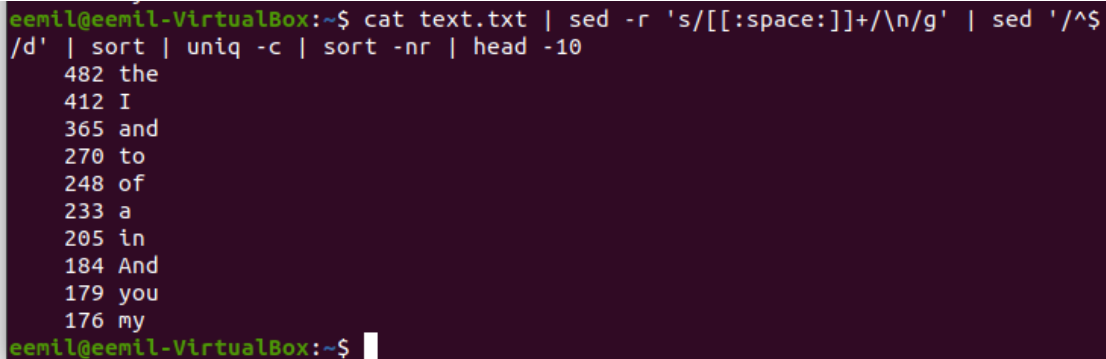
```
1 #! /bin/sh
2
3 #Sources https://linuxhint.com/sed\_remove\_whitespace/, https://unix.stackexchange.com/questions/41479/find-n-most-frequent-words-in-a-file
4
5
6 if [ "$#" -eq "0" ]
7 then
8     echo "usage: count filename.txt"
9 else
10    cat "$1" | sed -r 's/[[:space:]]+/\n/g' | sed '/^$/d' | sort | uniq -c | sort -nr | head -10
11 fi
12
13
14
```



The screenshot shows a terminal window titled "eemil@eemil-VirtualBox: ~". The user has run the command `./count text.txt`. The output displays the top 10 most frequent words in the file, sorted by frequency in descending order. Each line shows the frequency count followed by the word.

```
eemil@eemil-VirtualBox:~$ ./count text.txt
482 the
412 I
365 and
270 to
248 of
233 a
205 in
184 And
179 you
176 my
eemil@eemil-VirtualBox:~$
```

I also found that the script could be operated in the terminal, shown below:



The screenshot shows a terminal window where the user has run the command `cat text.txt | sed -r 's/[[:space:]]+/\n/g' | sed '/^$/d' | sort | uniq -c | sort -nr | head -10`. The output is identical to the one shown in the previous screenshot, displaying the top 10 most frequent words in the file.

```
eemil@eemil-VirtualBox:~$ cat text.txt | sed -r 's/[[:space:]]+/\n/g' | sed '/^$/d' | sort | uniq -c | sort -nr | head -10
482 the
412 I
365 and
270 to
248 of
233 a
205 in
184 And
179 you
176 my
eemil@eemil-VirtualBox:~$
```