

Experiment No.: 5

Date 13-03-2023

AIM: Familiarization of linux commands.

CO2: Perform system administration task.

Procedure:

1. read : read content of line
\$read
\$ echo \$REPLY

```
student@t2:~$ mkdir experiment3
student@t2:~$ cd experiment3
student@t2:~/experiment3$ read
my name is keerthi
```

- 1.1. Read into variables
\$ read var1 var2 var 3

```
student@t2:~/experiment3$ read var1 var2 var3
say hello keerthy
student@t2:~/experiment3$ echo "[$var1][$var2][$var3]"
[say][hello][keerthy]
```

- 1.2 read multiple lines using backslash

```
student@t2:~/experiment3$ read
course\
> name\
> rollno
student@t2:~/experiment3$ echo $REPLY
coursenamerollno
```

- 1.3 \$read -p : Prompt something in the screen
\$read -p "something "

```
student@t2:~/experiment3$ read -p "Enter your name"
Enter your name keerthi

student@t2:~/experiment3$ echo "my name is" $REPLY
my name is keerthi
```

- 1.4 \$read -n: read only a specific length of characters

```
student@t2:~/experiment3$ read -n 6 -p "enter 6 character only"
enter 6 character only kanikstudent@t2:~/experiment3$ read -n 6 -p "enter 6 character only"
enter 6 character only keertstudent@t2:~/experiment3$ read -n 8 -p "enter 6 character only"
```

1.5 \$read -s : read secure data like passwords

\$read -s -p "Enter password"

```
enter 6 character only keerthistudent@t2:~/experiment3$ read -s -p "enter the password"
enter the passwordstudent@t2:~/experiment3$ echo "password is $REPLY"
password is 3345
```

2. \$wc filename: display the details of file

```
student@t2:~/experiment3$ cat > program3
my name is keerthi
master of computer application
Amaljyothi college of engineering
kanjirappally
^Z
[1]+  Stopped                  cat > program3
student@t2:~/experiment3$ wc program3
 4 13 98 program3
```

2.1 \$wc -l : To display number of lines

\$wc -l profile

```
student@t2:~/experiment3$ wc -l program3
4 program3
```

2.2 \$wc -m : To display number of bytes

\$wc -m profile

```
student@t2:~/experiment3$ wc -m program3
98 program3
```

2.3 \$wc -c : To display number of characters

\$wc -c profile

```
student@t2:~/experiment3$ wc -c program3
98 program3
```

2.4 \$wc -w: To display number of words

\$wc -w profile

```
student@t2:~/experiment3$ wc -w program3
13 program3
```

2.5 \$wc -L : Length of the longest line

\$wc -l profile

```
student@t2:~/experiment3$ wc -L program3
33 program3
student@t2:~/experiment3$
```

2.6: more [filename]

The more command is similar to cat to display the content. The only difference is that in case of large files, cat command output will scroll off your screen while more command display output one output screen at a time.

\$ more samplefile.txt

```
^Z
[1]+  Stopped                  cat > samplefile.txt
vboxuser@ubuntu:~$ more samplefile.txt
A computer is a machine that can be programmed to carry out sequences of arithmetic or logical operations (computation) automatically. Modern digital electronic computers can perform generic sets of operations known as programs. These programs enable computers to perform a wide range of tasks. A computer system is a nominally complete computer that includes the hardware, operating system (main software), and peripheral equipment needed and used for full operation. This term may also refer to a group of computers that are linked and function together, such as a computer network or computer cluster.

A broad range of industrial and consumer products use computers as control systems. Simple special-purpose devices like microwave ovens and remote controls are included, as are factory devices like industrial robots and computer-aided design, as well as general-purpose devices like personal computers and mobile devices like smartphones. Computers power the Internet, which links billions of other computers and users.

Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th cen
```

```
Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th century. The first digital electronic calculating machines were developed during World War II. The first semiconductor transistors in the late 1940s were followed
--More--(56%)
```

2.7: more +[specified number of lines] [filename]

To display the contents of file after specified number of lines.

\$ more +5 samplefile.txt

```
vboxuser@ubuntu:~$ more +5 samplefile.txt
Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th century. The first digital electronic calculating machines were developed during World War II. The first semiconductor transistors in the late 1940s were followed by the silicon-based MOSFET (MOS transistor) and monolithic integrated circuit chip technologies in the late 1950s, leading to the microprocessor and the microcomputer revolution in the 1970s. The speed, power and versatility of computers have been increasing dramatically ever since then, with transistor counts increasing at a rapid pace (as predicted by Moore's law), leading to the Digital Revolution during the late 20th to early 21st centuries.
```

```
Conventionally, a modern computer consists of at least one processing element, typically a central processing unit (CPU) in the form of a microprocessor, along with some type of computer memory, typically semiconductor memory chips. The processing element carries out arithmetic and logical operations, and a sequencing and control unit can change the order of operations in response to stored information. Peripheral devices include input devices (keyboards, mice, joystick, etc.), output devices (monitor screens, printers, etc.), and input/output devices th
```

```
Conventionally, a modern computer consists of at least one processing element, typically a central processing unit (CPU) in the form of a microprocessor, along with some type of computer memory, typically semiconductor memory chips. The processing element carries out arithmetic and logical operations, and a sequencing and control unit can change the order of operations in response to stored information. Peripheral devices include input devices (keyboards, mice, joystick, etc.), output devices (monitor screens, printers, etc.), and input/output devices that perform both functions (e.g., the 2000s-era touchscreen). Peripheral devices allow information to be retrieved from an external source and they enable the re
--More-- (98%)
```

2.8: more +/[pattern] [filename]

This option is used to search the string inside your text document. You can view all the instances by navigating through the results.

```
$ more +/computer samplefile.txt
```

```
vboxuser@ubuntu:~$ more +/user samplefile.txt
```

...skipping

A broad range of industrial and consumer products use computers as control systems. Simple special-purpose devices like microwave ovens and remote controls are included, as are factory devices like industrial robots and computer-aided design, as well as general-purpose devices like personal computers and mobile devices like smartphones. Computers power the Internet, which links billions of other computers and users.

Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th century. The first digital electronic calculating machines were developed during World War II. The first semiconductor transistors in the late 1940s were followed by the silicon-based MOSFET (MOS transistor) and monolithic integrated circuit chip technologies in the late 1950s, leading to the microprocessor and the microcomputer revolution in the 1970s. The speed, power and versatility of computers have been increasing dramatically ever since then, with transistor counts increasing at a rapid pace (as predicted by Moore's law), leading to the Digital Revolution during the late 20th to early 21st centuries.

```
Conventionally, a modern computer consists of at least one processing element, t
--More-- (75%)
```

2.9: `more -d [filename]`

To help users to navigate through file according to the instruction. Displays “space to continue, 'q' to quit”.

`$more -d samplefile.txt`

```
vboxuser@ubuntu:~$ more -d samplefile.txt
```

A computer is a machine that can be programmed to carry out sequences of arithmetic or logical operations (computation) automatically. Modern digital electronic computers can perform generic sets of operations known as programs. These programs enable computers to perform a wide range of tasks. A computer system is a nominally complete computer that includes the hardware, operating system (main software), and peripheral equipment needed and used for full operation. This term may also refer to a group of computers that are linked and function together, such as a computer network or computer cluster.

A broad range of industrial and consumer products use computers as control systems. Simple special-purpose devices like microwave ovens and remote controls are included, as are factory devices like industrial robots and computer-aided design, as well as general-purpose devices like personal computers and mobile devices like smartphones. Computers power the Internet, which links billions of other computers and users.

Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th cen


```
Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices were built to automate long, tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th century. The first digital electronic calculating machines were developed during World War II. The first semiconductor transistors in the late 1940s were followed  
--More--(56%)[Press space to continue, 'q' to quit.]
```

Result

The program was executed and the result was successfully obtained. Thus CO₂ was obtained