Practical No. 5

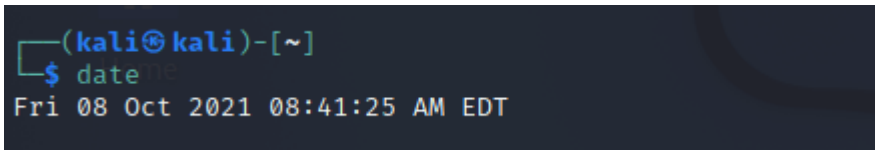
Aim: List of Basic Kali Linux Command.

1. Time and Date Command

This command is used to set the current date and time in the system. It is one of the basic kali linux commands.

In Kali Linux, the **'date'** command is used to display the **system date** and **time.** In order to display the date, we have to use the following command:

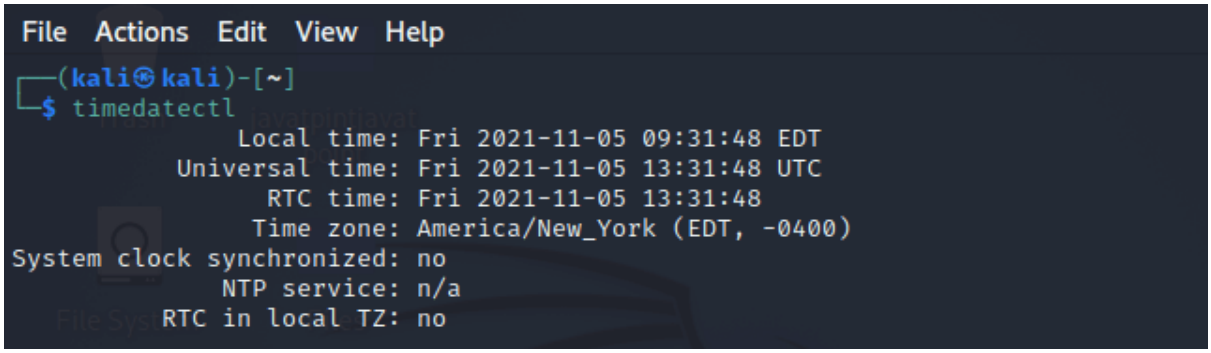
$ date



Setting your system time and time zone is usually done when initially installing Kali. If that step is skipped during installation, have switched time zones, or your system clock has drifted out of sync it could be done later as given below.

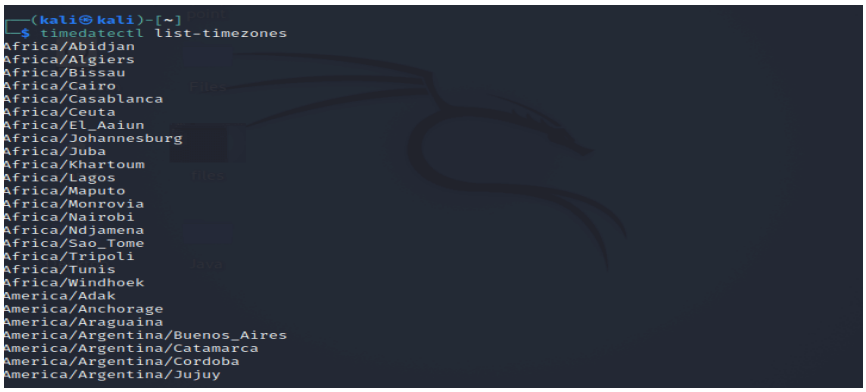
Step 1: First, in order to find out what time zone our system is presently configured for, we have to open the terminal and execute the following command.

$ timedatectl



Step2: Next, with the help of the following command, we can get a list of accessible time zones. Choose one which is appropriate for our area and configure our system to that time zone in the next step.

$ timedatectl list-timezones



In order to narrow down the search, we can use the **grep command.** This command will provide a list of all possible time zones in **Australia,** as shown in the example below:

```
┌──(kali㉿kali)-[~]
└─$ timedatectl list-timezones | grep Australia
Australia/Adelaide
Australia/Brisbane
Australia/Broken_Hill
Australia/Darwin
Australia/Eucla
Australia/Hobart
Australia/Lindeman
Australia/Lord_Howe
Australia/Melbourne
Australia/Perth
Australia/Sydney
```

Step 3: We need to use the following syntax to set the system's time zone once we've selected the correct time zone from the list.

$ sudo timedatectl set-timezone Australia/Sydney

Step 4: Use the **timedatectl** command to verify that the modifications have taken effect.

```
┌──(kali㉿kali)-[~]
└─$ timedatectl
               Local time: Sat 2021-11-06 00:34:54 AEDT
           Universal time: Fri 2021-11-05 13:34:54 UTC
                 RTC time: Fri 2021-11-05 13:34:53
                Time zone: Australia/Sydney (AEDT, +1100)
System clock synchronized: no
              NTP service: n/a
          RTC in local TZ: no
```

Step 5: We can use the following commands, in order to turn time synchronization **on** or **off:**

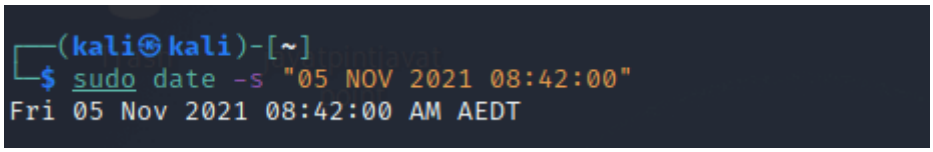
$ sudotimedatectl set-ntp on

OR

$ sudotimedatectl set-ntp off

Step 6: If we want to change the system clock to a certain date and time, make sure time synchronization is off (as described above) and use the following **date** command. This command will set the date and time to **05 November 2021, 08:42 PM,** but we can substitute any value which we want.

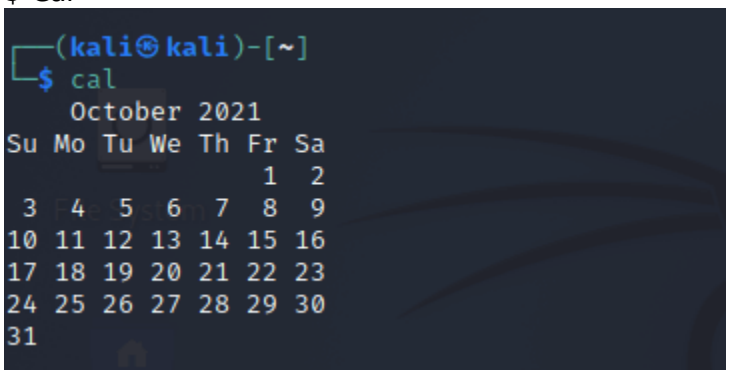
$ sudo date -s "05 NOV 2021 08:42:00"



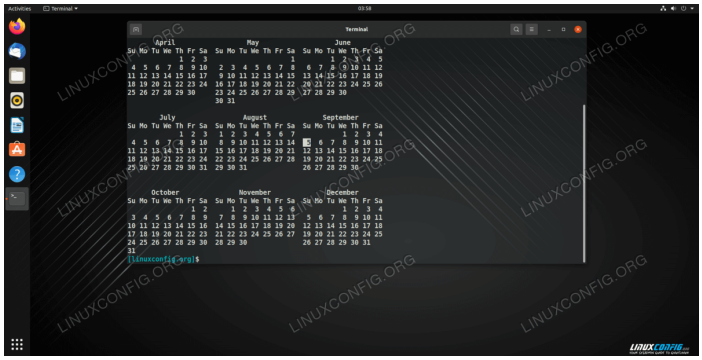
2. Cal Command

The cal command displays the current **month's formatted calendar** on our terminal screen. If we require a more advanced version of **cal,** we can install the **ncal package** on our Linux machine, which displays the calendar vertically and provides additional options.

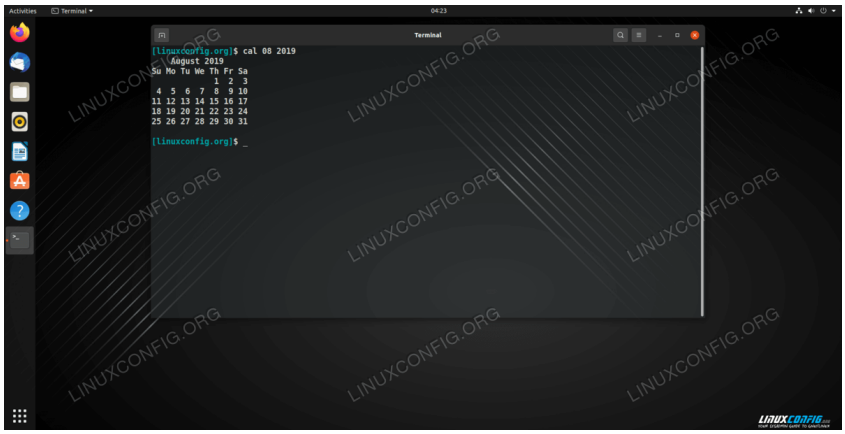
$ Cal



$ cal -y

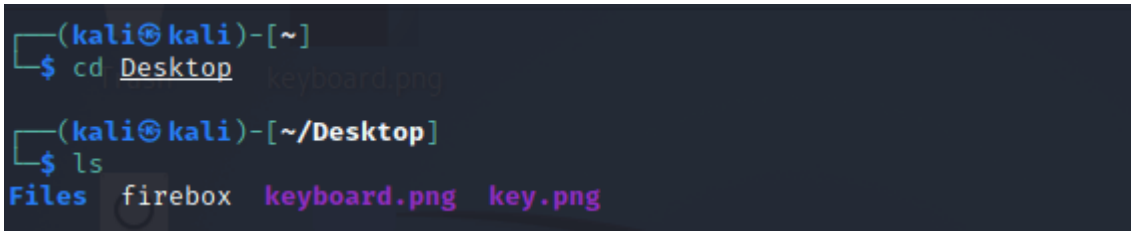


$ cal 08 2019



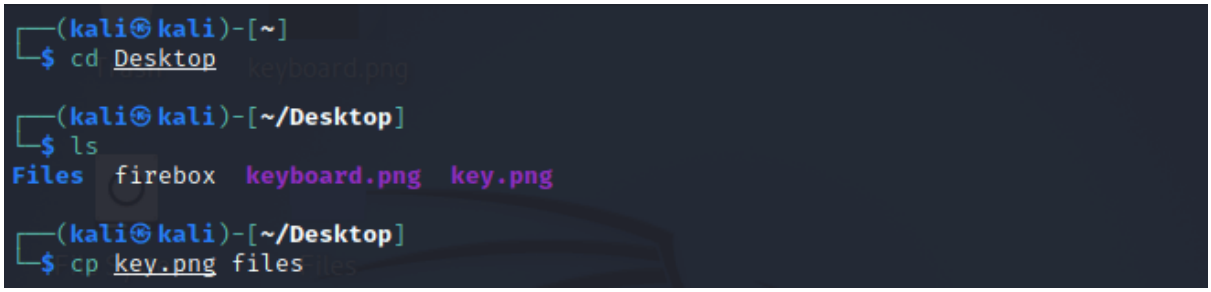
3. Cd Command

The **'cd'** command is also called **chdir** (Change Directory). We used this command to **change** or **switch** the current working directory.



4. cp Command

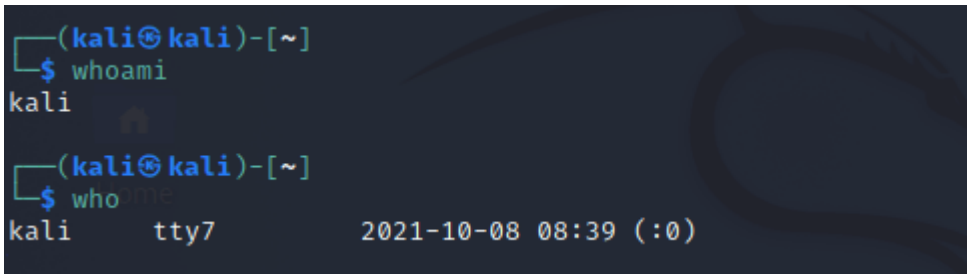
In Kali Linux, the **'cp'** command is used to **copy** files or a group of files or directories that create an exact image of a file on a disk with a different file name.



whoami Command

The **'whoami'** command is used to print the effective **user ID** whereas the **who** command prints information regarding users who are presently logged in.

The **"w"** command can also be used to view who is logged on and what they are doing.



Ls Command

One of the most useful commands in Kali Linux is the **'ls'** command. The **ls** command lists the directory contents of files and directories. With the help of the **ls** command, we can easily list out every hidden file of a directory with the **-a** attribute, and for more detailed output, we can use the **-l** attribute.

$ ls -al

```
┌──(kali㉿kali)-[~]
└─$ ls -al
total 148
drwxr-xr-x 15 kali kali  4096 Oct  8 08:43 .
drwxr-xr-x  3 root root  4096 May 30 18:01 ..
-rw-r--r--  1 kali kali     1 Jun  1 01:59 .bash_history
-rw-r--r--  1 kali kali   220 May 30 18:01 .bash_logout
-rw-r--r--  1 kali kali  5349 May 30 18:01 .bashrc
-rw-r--r--  1 kali kali  3526 May 30 18:01 .bashrc.original
drwxr-xr-x 11 kali kali  4096 Oct  8 08:40 .cache
drwx------ 11 kali kali  4096 Sep 17 12:51 .config
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Desktop
-rw-r--r--  1 kali kali    55 May 31 17:33 .dmrc
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Documents
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Downloads
-rw-r--r--  1 kali kali 11759 May 30 18:01 .face
lrwxrwxrwx  1 kali kali     5 May 30 18:01 .face.icon → .face
drwx------  3 kali kali  4096 May 31 03:35 .gnupg
-rw-------  1 kali kali     0 May 31 03:35 .ICEauthority
drwxr-xr-x  3 kali kali  4096 May 31 03:35 .local
drwx------  5 kali kali  4096 Aug  8 06:02 .mozilla
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Music
drwxr-xr-x  2 kali kali  4096 Oct  8 08:41 Pictures
-rw-r--r--  1 kali kali   807 May 30 18:01 .profile
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Public
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Templates
-rw-r-----  1 kali kali     4 Oct  8 08:39 .vboxclient-draganddrop.pid
-rw-r-----  1 kali kali     4 Oct  8 08:39 .vboxclient-seamless.pid
drwxr-xr-x  2 kali kali  4096 May 31 03:35 Videos
-rw-------  1 kali kali    49 Oct  8 08:39 .Xauthority
-rw-------  1 kali kali  6947 Oct  8 08:43 .xsession-errors
```

Cat Command

The **'cat'** (concatenate) command is one of Kali Linux's most commonly used commands, permitting us to create single or many files, concatenate files and redirect, view contain of file output in terminal or files.

Usually, we use the cat command to display the content of a file.

$ cat filename

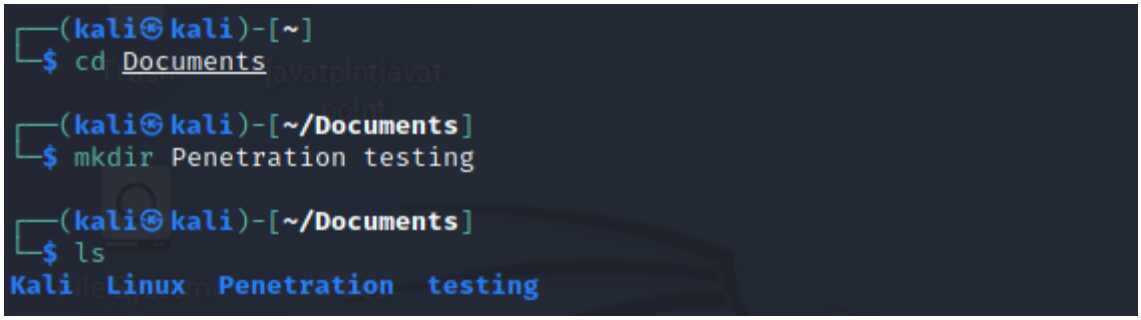
```
┌──(kali㉿kali)-[~]
└─$ echo "Welcome to JavaTpoint" > file.text

┌──(kali㉿kali)-[~]
└─$ cat file.text
Welcome to JavaTpoint
```

mkdir Command

The **'mkdir'** command is used to **create directories.** For example, if we wish to create a directory named **'Penetration testing'** under the **'Documents'** directory, then we have to open a terminal and enter the below command:

cd Documents

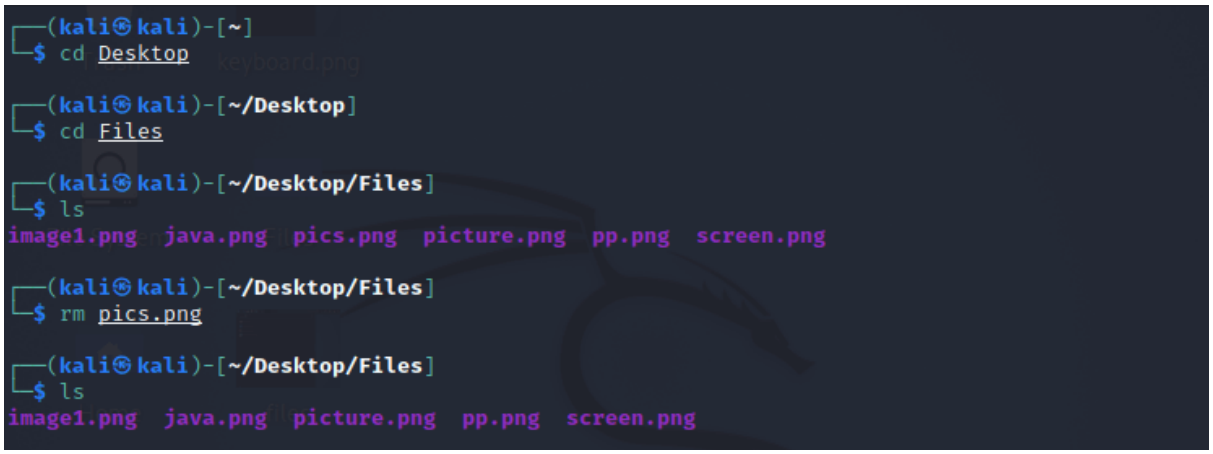
mkdir Penetration testing



rm Command

In Kali Linux, the **'rm'** command is used to **delete files.** It can be used to delete directories when we use them recursively.

The removal process separates a file name form its associated data in a file system and identifies that space in the storage device as available for future writes. In other words, when we erase a file. the data inside it remains unchanged, but it is no longer linked to a filename.



mv Command

With the help of the **'mv'** command, we can **move** or **renames** files and directories on our file system.

```
┌──(kali㉿kali)-[~]
└─$ cd Desktop

┌──(kali㉿kali)-[~/Desktop]
└─$ ls
files  Files  firebox  keyboard.png

┌──(kali㉿kali)-[~/Desktop]
└─$ mv keyboard.png Files

┌──(kali㉿kali)-[~/Desktop]
└─$ cd Files

┌──(kali㉿kali)-[~/Desktop/Files]
└─$ ls
image1.png  java.png  keyboard.png  key.png  picture.png  pp.png  screen.png
```

uname Command

The **'uname'** command displays the **current system's information.** We can view system information about our Linux environment with the uname command in Linux. With the **uname -a command,** we can learn more about our system, including **Kernel Name, Node Name, Kernel Release, Kernel Version, Hardware Platform, Processor,** and **Operating System.**

$uname

```
┌──(kali㉿kali)-[~]
└─$ uname
Linux

┌──(kali㉿kali)-[~]
└─$ uname -a
Linux kali 5.10.0-kali7-686-pae #1 SMP Debian 5.10.28-1kali1 (2021-04-12) i686 GNU/Linux

┌──(kali㉿kali)-[~]
└─$ users
kali
```

uptime Command

The **'uptime'** command displays the amount of time the system has been running. Uptime's basic usage is simple: simply **type** the name of the command and click **Enter.**

Use the **-p** command-line option if we merely want to know how long the system has been up for and in a more human-readable format.

$ uptime

```
┌──(kali㉿kali)-[~]
└─$ uptime
 09:34:53 up 57 min,  1 user,  load average: 0.29, 0.18, 0.16
```

users Command

The **'users'** command is used to display the **login names** of users logged in on the system.

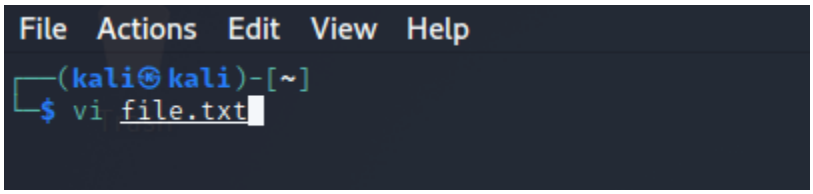
$ users

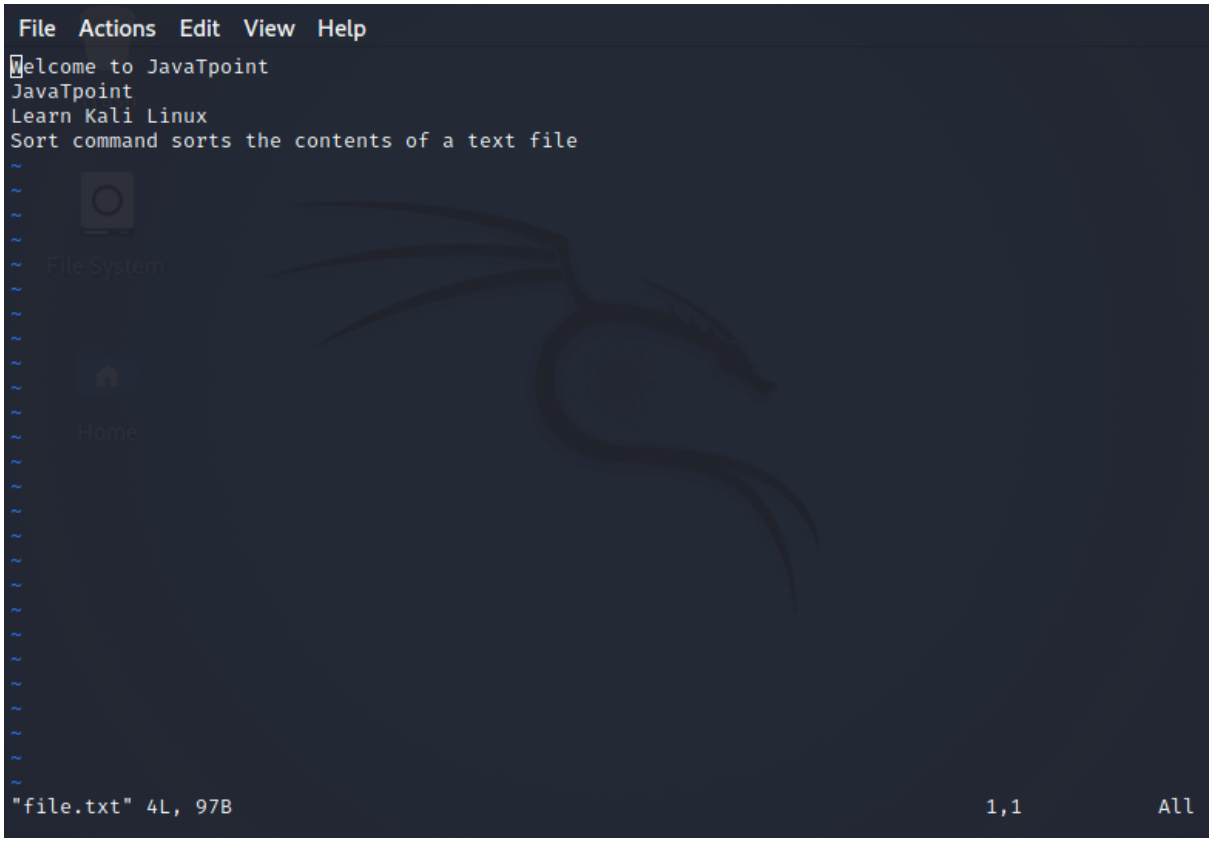
vi Command

The **'vi'** editor is a screen editor that comes with practically every **UNIX** system. The **command mode** and the **insert mode** are the two most common nodes in vi.

In order to start entering text in an empty file, we have to first switch from the command mode to the insert mode. To accomplish this, start typing the letter i. When we start typing, anything then the type will be entered into the file.

Type some short lines, then press Return at the end of each. **Vi** does not use word wrap like other word processors. It will break a line at the screen' edge. If we make a mistake, we can undo it by pressing the **Backspace** key. If the Backspace key on our computer is not working, then try the **ctrl + h** key combination.




File Actions Edit View Help
Welcome to JavaTpoint
JavaTpoint
Learn Kali Linux
Sort command sorts the contents of a text file
"file.txt" 4L, 97B 1,1 All