

OPERATING SYSTEM

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SECTION: BSCS-5A

File Command:

file command is used to determine the type of a file. .file type may be of human-readable(e.g. 'ASCII text') or MIME type(e.g. 'text/plain; charset=us-ascii'). This command tests each argument in an attempt to categorize it.

It has three sets of tests as follows:

filesystem test: This test is based on the result which returns from a stat system call. The program verifies that if the file is empty, or if it's some sort of special file. This test causes the file type to be printed.

magic test: These tests are used to check for files with data in particular fixed formats.

language test: This test search for particular strings which can appear anywhere in the first few blocks of a file.

Syntax:

file [option] [filename]

Example: Command displays the file type

file email.py

file name.jpeg

file Invoice.pdf

file exam.ods

file videosong.mp4

Options:

-b, --brief : This is used to display just file type in brief mode.

Syntax:

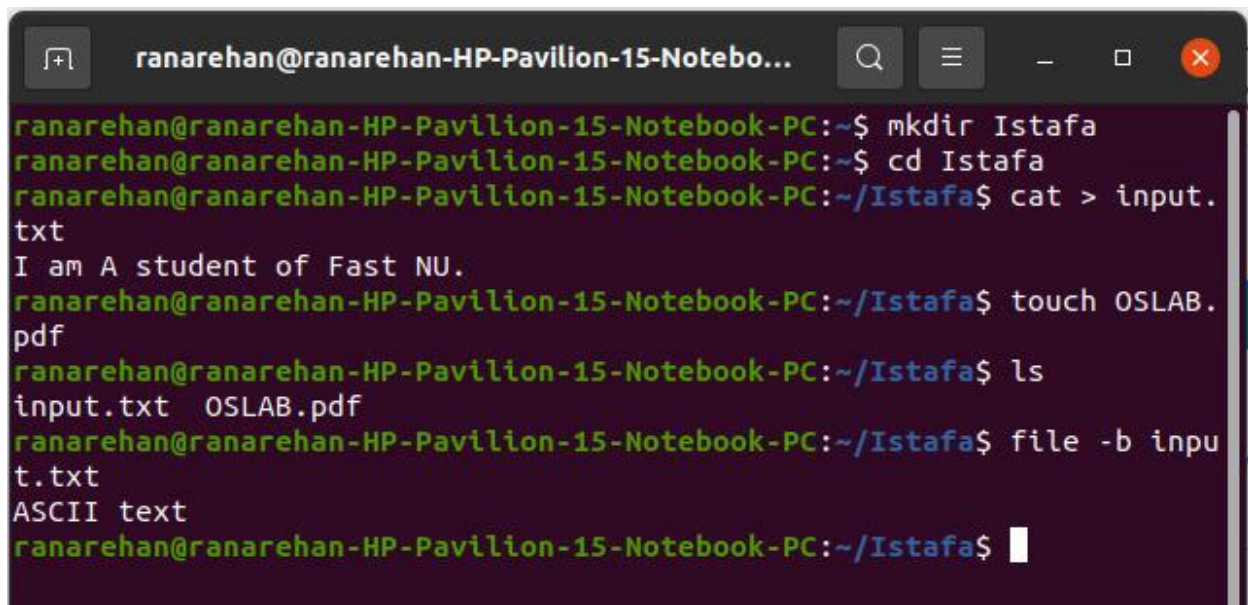
file -b filename

Example:

file -b email.py

file -b input.txt

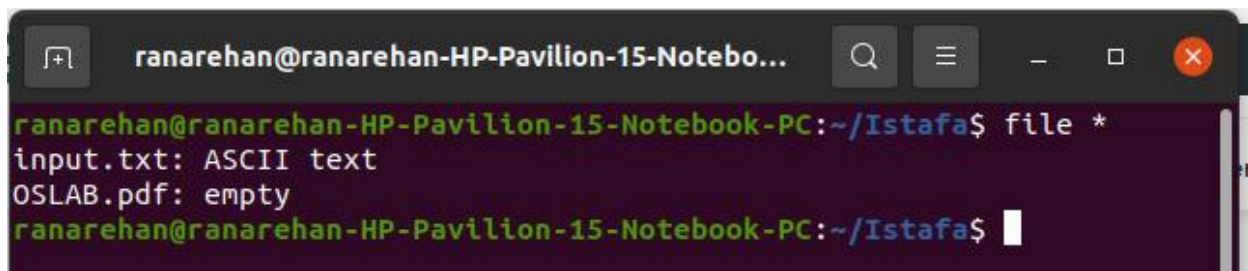
file -b os.pdf

A terminal window titled 'ranarehan@ranarehan-HP-Pavilion-15-Notebo...' with standard window controls. The terminal shows a sequence of commands: 'mkdir Istafa', 'cd Istafa', 'cat > input.txt' followed by the text 'I am A student of Fast NU.', 'touch OSLAB.pdf', 'ls' showing 'input.txt' and 'OSLAB.pdf', and 'file -b input.txt' which outputs 'ASCII text'.

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~$ mkdir Istafa
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~$ cd Istafa
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ cat > input.txt
I am A student of Fast NU.
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ touch OSLAB.pdf
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ ls
input.txt  OSLAB.pdf
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ file -b input.txt
ASCII text
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$
```

* option : Command displays the all files's file type.

file *

A terminal window titled 'ranarehan@ranarehan-HP-Pavilion-15-Notebo...' with standard window controls. The terminal shows the command 'file *' which outputs 'input.txt: ASCII text' and 'OSLAB.pdf: empty'.

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ file *
input.txt: ASCII text
OSLAB.pdf: empty
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$
```

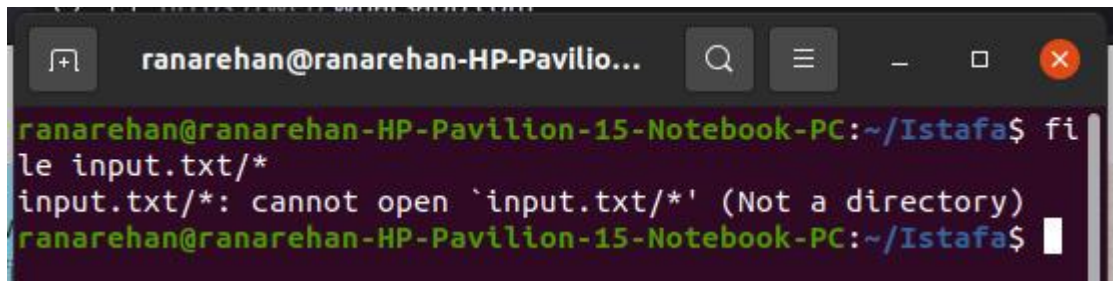
directoryname/* option : This is used to display all files filetypes in particular directory.

Syntax:

file directoryname/*

Example:

file work/*

A terminal window screenshot with a dark background. The title bar shows 'ranarehan@ranarehan-HP-Pavilio...'. The prompt is 'ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa\$'. The command 'file input.txt/*' has been entered. The output is 'input.txt/*: cannot open `input.txt/*' (Not a directory)'. The prompt is now 'ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa\$' with a cursor.

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ file input.txt/*
input.txt/*: cannot open `input.txt/*' (Not a directory)
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$
```

[range]* option: To display the file type of files in specific range.

Syntax:

file [range]*

Example:

file [a-z]*

file [a-e]*

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-P...
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ file [a-z]*
assignmnet: directory
fast.txt:  ASCII text
input.txt: ASCII text
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$
```

-F option : File and file type are separated by :. But we can change separator using -F option

Syntax:

file -F "-" filename

Example:

file -F - input.txt

file -F + os.pdf

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-P...
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$ file -F -input.
txt
Usage: file [-bcCdEhikLlNnprsSvzZ0] [--apple] [--extension] [--mime-enco
ding]
           [--mime-type] [-e <testname>] [-F <separator>] [-f <namefil
e>]
           [-m <magicfiles>] [-P <parameter=value>] <file> ...
file -C [-m <magicfiles>]
file [--help]
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~/Istafa$
```

–help option: Print a help message and exit.

```
ranarehan@ranarehan-HP-Pavilion-15-Notebook-P...
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~$ file -help option
Usage: file [-bcCdEhikLlNnprsSvzZ0] [--apple] [--extension] [--mime-encoding]
        [--mime-type] [-e <testname>] [-F <separator>] [-f <namefile>]
        [-m <magicfiles>] [-P <parameter=value>] <file> ...
file -C [-m <magicfiles>]
file [--help]
ranarehan@ranarehan-HP-Pavilion-15-Notebook-PC:~$
```