# Grep – get regular expression Print

Find string , substring in the file.

* check the folders/files

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ls

Basic\_Commands.txt Linux2 Memo.txt Names.txt

* create new directory and check all files again

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ mkdir Linux3

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ls

Basic\_Commands.txt Linux2 Linux3 Memo.txt Names.txt

* check matching name

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'John' Names.txt

Dave Johnson

John Davis

Maggie Johnson

Linda Johnson

John Arnold

John Thomas

John Williams

John Williamson

John Jefferson

* Lower case 'w' doesn't return any results /Select only those lines containing matches that form whole words

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'John william' Names.txt

* return 2 results for 'John William'

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'John William' Names.txt

John Williams

John Williamson

* return matching whole word

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -w 'John Williams' Names.txt

John Williams

* return lower case and upper case // I - Pocess a Binary files as if it did not contain matching data

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -wi 'John Williams' Names.txt

john williams

John Williams

* ---n, --line-number

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win 'John Williams' Names.txt

51:john williams

431:John Williams

* Return -B NUM, --before-context=NUM -Print NUM lines of leading context before matching lines.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -B 4 'John Williams' Names.txt

47-119-555-3358

48-508 Pine St., Valyria MD 28445

49-mariajones@bogusemail.com

50-

51:john williams

--

427-218-555-5260

428-502 Maple St., Gotham OR 44147

429-lauraarnold@bogusemail.com

430-

431:John Williams

* -A NUM, --after-context=NUM -- Print NUM lines of trailing context after matching lines.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -A 4 'John Williams' Names.txt

51:john williams

52-304-555-4321

53-607 Martin Hollow, Chucktown WV 25311

54-johnw@johnscompany.com

55-

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431:John Williams

432-515-555-4529

433-606 Pearl St., Eerie MI 10261

[434-johnwilliams@bogusemail.com](mailto:434-johnwilliams@bogusemail.com)

* -C NUM, -NUM, --context=NUM - Print NUM lines of output context.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -C 4 'John Williams' Names.txt

47-119-555-3358

48-508 Pine St., Valyria MD 28445

49-mariajones@bogusemail.com

50-

51:john williams

52-304-555-4321

53-607 Martin Hollow, Chucktown WV 25311

54-johnw@johnscompany.com

55-

--

427-218-555-5260

428-502 Maple St., Gotham OR 44147

429-lauraarnold@bogusemail.com

430-

431:John Williams

432-515-555-4529

433-606 Pearl St., Eerie MI 10261

[434-johnwilliams@bogusemail.com](mailto:434-johnwilliams@bogusemail.com)

* Return 'John Williams' from all folders

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -C 1 'John Williams' ./\*

grep: ./Linux2: Is a directory

grep: ./Linux3: Is a directory

./Memo.txt-2-

./Memo.txt:3:In our meeting today, John Williams had mentioned that the work could be completed by the end of the month.

./Memo.txt-4-

--

./Names.txt-50-

./Names.txt:51:john williams

./Names.txt-52-304-555-4321

--

./Names.txt-430-

./Names.txt:431:John Williams

./Names.txt-432-515-555-4529

* Return recursive search – Read all files under each directory

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -winr 'John Williams' ./

./Memo.txt:3:In our meeting today, John Williams had mentioned that the work could be completed by the end of the month.

./Names.txt:51:john williams

./Names.txt:431:John Williams

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -winr 'John Williams' .

./Memo.txt:3:In our meeting today, John Williams had mentioned that the work could be completed by the end of the month.

./Names.txt:51:john williams

./Names.txt:431:John Williams

* -c or --count option

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -winrc 'John Williams' .

./Basic\_Commands.txt:0

./grep.docx:0

./Memo.txt:1

./Names.txt:2

./~$grep.docx:0

* -l, --files-without-match- Suppress normal output; instead print the name of each input file from which output would normally have been printed

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -winrl 'John Williams' .

./Memo.txt

./Names.txt

* -L, --files-without-match- Suppress normal output; instead print the name of each input file from which no output would normally have been printed

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -winrL 'John Williams' .

./Basic\_Commands.txt

./grep.docx

./~$grep.docx

* History

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ history | grep "win"

29 grep -win 'John Williams' Names.txt

30 grep -win -B 4 'John Williams' Names.txt

31 grep -win -A 4 'John Williams' Names.txt

32 grep -win -C 4 'John Williams' Names.txt

33 grep -win -C 4 'John Williams' ./\*

34 grep -win -C 1 'John Williams' ./\*

35 trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -C 4 'John Williams' Names.txt

53 grep -win -C 1 'John Williams' ./\*

54 grep -win -C 1 'John Williams' ./

55 grep -winr 'John Williams' ./

56 grep -winr 'John Williams' .

58 grep -winrl 'John Williams' .

59 grep -winrL 'John Williams' .

60 grep -winrc 'John Williams' .

65 history | grep "win"

* Total number and phone numbers.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -rc "...-...-...." Names.txt

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trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "...-...-...." Names.txt

836-555-5439

442-555-9487

886-555-6636

489-555-4991

366-555-4305

701-555-5108

* Narrow down history search results

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ history | grep "win" | grep "txt"

29 grep -win 'John Williams' Names.txt

30 grep -win -B 4 'John Williams' Names.txt

31 grep -win -A 4 'John Williams' Names.txt

32 grep -win -C 4 'John Williams' Names.txt

35 trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -win -C 4 'John Williams' Names.txt

66 history | grep "win" | grep "txt"

* Return the digit with 3 -3-4 numbers

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -P "\d{3}-\d{3}-\d{4}" Names.txt

836-555-5439

442-555-9487

886-555-6636

489-555-4991

366-555-4305

701-555-5108

678-555-3299

788-555-3577

201-555-1871

* Interpret PATTERNS as Perl-compatible regular expressions

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -wirlP "\d{3}-\d{3}-\d{4}" .

./Names.txt

Examples:

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "Hello world" New\_word.txt

Finally, 'Hello world'.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "Hello world" New\_word.txt Memo.txt

New\_word.txt:Finally, 'Hello world'.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep is \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:Tom Harris

Names.txt:tomharris@bogusemail.com

Names.txt:Dave Harris

Names.txt:191 Main St., Atlantis UT 56578

Names.txt:Linda Davis

Names.txt:lindadavis@bogusemail.com

Names.txt:928 Cedar St., Metropolis NY 17988

Names.txt:697 Park St., Metropolis AK 54821

New\_word.txt:This is Line 1.

New\_word.txt:This is Line 2.

New\_word.txt:This is Line 13.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep line \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

New\_word.txt:This is line 4.

New\_word.txt:This is line 5.

New\_word.txt:This is line 6.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -i line \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

New\_word.txt:This is Line 1.

New\_word.txt:This is Line 2.

New\_word.txt:This is Line 3.

New\_word.txt:This is line 4.

New\_word.txt:This is line 5.

New\_word.txt:This is line 6.

New\_word.txt:This is LINE 11.

New\_word.txt:This is Line 13.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -v line New\_word.txt

This is Line 1.

This is Line 2.

This is Line 3.

7,8,9,10

This is LINE 11.

This is 12.

This is Line 13.

Finally, 'Hello world'.

Good bye.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -iv line New\_word.txt

7,8,9,10

This is 12.

Finally, 'Hello world'.

Good bye.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 88 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:886-555-6636

Names.txt:675 Pearl St., Dawnstar AK 82889

Names.txt:788-555-3577

Names.txt:195 Park St., Lakeview ID 88019

Names.txt:799 Main St., Valyria MN 45880

Names.txt:888-555-1673

Names.txt:394-555-2588

Names.txt:688-555-3426

Names.txt:720 Lake St., Gotham OR 26588

Names.txt:880-555-3943

Names.txt:257 Hill St., Quahog MO 48893

Names.txt:586-555-8861

Names.txt:960 Lake St., South Park TX 88239

Names.txt:206 Elm St., Olympus FL 73885

Names.txt:928 Cedar St., Metropolis NY 17988

Names.txt:592 Hill St., Epicburg AK 88205

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -c 3 \*

Basic\_Commands.txt:8

grep: Linux2: Is a directory

Linux2:0

grep: Linux3: Is a directory

Linux3:0

Memo.txt:0

Names.txt:112

New\_word.txt:2

grep.docx:44

~$grep.docx:0

~WRL3808.tmp:28

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -i "elm st" \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:145 Elm St., Quahog OR 15856

Names.txt:467 Elm St., Oldtown OR 44675

Names.txt:811 Elm St., Dawnstar LA 11333

Names.txt:956 Elm St., Bedrock WY 96353

Names.txt:995 Elm St., Olympus DC 94262

Names.txt:665 Elm St., Blackwater PA 94989

Names.txt:206 Elm St., Olympus FL 73885

Names.txt:368 Elm St., Gotham NM 37399

Names.txt:483 Elm St., South Park KY 38201

Names.txt:240 Elm St., Epicburg ND 61305

Names.txt:341 Elm St., Thundera ND 31490

Names.txt:274 Elm St., Lakeview OH 44928

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 123 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 483 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:483 Elm St., South Park KY 38201

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -A 2 483 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:483 Elm St., South Park KY 38201

Names.txt-nicolesmith@bogusemail.com

Names.txt-

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -B 2 483 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt-Nicole Smith

Names.txt-273-555-9174

Names.txt:483 Elm St., South Park KY 38201

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -C 2 483 \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt-Nicole Smith

Names.txt-273-555-9174

Names.txt:483 Elm St., South Park KY 38201

Names.txt-nicolesmith@bogusemail.com

Names.txt-

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "^[0-9]" New\_word.txt

7,8,9,10

Example 2:

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -V

grep (GNU grep) 3.4

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This is free software: you are free to change and redistribute it.

There is NO WARRANTY, to the extent permitted by law.

Written by Mike Haertel and others; see

<https://git.sv.gnu.org/cgit/grep.git/tree/AUTHORS>.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ apt -cache policy grep

W: Unable to read ache - open (2: No such file or directory)

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ apt-cache policy grep

grep:

Installed: 3.4-1

Candidate: 3.4-1

Version table:

\*\*\* 3.4-1 500

500 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages

100 /var/lib/dpkg/status

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ls

Basic\_Commands.txt Linux2 Linux3 Memo.txt Names.txt New\_word.txt grep.docx '~$grep.docx' '~WRL3808.tmp'

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'world' New\_word.txt

Finally, 'Hello world'.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'world' \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:670 Washington St., Westworld OK 81667

Names.txt:420 Hill St., Westworld MA 21015

Names.txt:444 Maple St., Westworld WI 43381

New\_word.txt:Finally, 'Hello world'.

Example:

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "^[0-9]" New\_word.txt

7,8,9,10

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep "^[0-9]" \* | grep 483

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:483 Elm St., South Park KY 38201

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ apt-cache policy grep

grep:

Installed: 3.4-1

Candidate: 3.4-1

Version table:

\*\*\* 3.4-1 500

500 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages

100 /var/lib/dpkg/status

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ls

Basic\_Commands.txt Linux2 Linux3 Memo.txt Names.txt New\_word.txt grep.docx '~$grep.docx' '~WRL3808.tmp'

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'world' New\_word.txt

Finally, 'Hello world'.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep 'world' \*

grep: Linux2: Is a directory

grep: Linux3: Is a directory

Names.txt:670 Washington St., Westworld OK 81667

Names.txt:420 Hill St., Westworld MA 21015

Names.txt:444 Maple St., Westworld WI 43381

New\_word.txt:Finally, 'Hello world'.

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ sudo apt install net-tools

[sudo] password for trupti:

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following NEW packages will be installed: net-tools

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ifconfig

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

inet 172.30.218.72 netmask 255.255.240.0 broadcast 172.30.223.255

inet6 fe80::215:5dff:fe44:836d prefixlen 64 scopeid 0x20<link>

ether 00:15:5d:44:83:6d txqueuelen 1000 (Ethernet)

RX packets 2062 bytes 519093 (519.0 KB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 95 bytes 6799 (6.7 KB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536

inet 127.0.0.1 netmask 255.0.0.0

inet6 ::1 prefixlen 128 scopeid 0x10<host>

loop txqueuelen 1000 (Local Loopback)

RX packets 0 bytes 0 (0.0 B)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 0 bytes 0 (0.0 B)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ ifconfig | grep 'eth0'

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep '^J' Names.txt

Jane Miller

Jane Patterson

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -i '^[^a-f]' Names.txt

Steve Williams

stevewilliams@bogusemail.com

Jane Miller

janemiller@bogusemail.com

Maggie Wilks

maggiewilks@bogusemail.com

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -i 'c.m' Names.txt

stevewilliams@bogusemail.com

janemiller@bogusemail.com

maggiewilks@bogusemail.com

mariamiller@bogusemail.com

samjefferson@bogusemail.com

lindawhite@bogusemail.com

michaelsmith@bogusemail.com

mariajefferson@bogusemail.com

trupti@Trupti\_hp:/mnt/c/users/-------/desktop/linux$ grep -ic 'c.m' Names.txt

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Note: <https://linuxcommand.org/lc3_man_pages/grep1.html>