How to use the grep command on Debian 10

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In this article, **TipsMake.com** will show you how to use **grep** command (many examples are included).

Note : The article has tested all commands and examples on machines running Debian 10.

Do you know how to use grep?

Prerequisites

You need to have a computer running Debian 10 with root access.

Install grep on Debian 10

By default, **grep** is installed on most systems including Debian 10. If it is not already installed, open the terminal and issue the following command as root.

```
apt-get install grep
```

When you are asked to confirm, press Y and then type from the keyboard. Wait for the installation process to finish.

Check the version of grep by running the following command in the terminal.

```
grep --version
```

The command will return the version along with other details as shown below.

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Use the grep command

Search for a specific file or directory in the system

When you want to search or locate a specific file in your system, the command's syntax is as follows.

```
ls -l ???ng d?n c?a th? m?c mu?n tìm ki?m> | grep -i 'tên file ho?c th? m?c'
```

Need to put the word you want to find in quotation marks if it contains spaces. Assuming you are looking for '**network daemon**' , the command will look like the following.

```
ls -l /etc/network/ | grep -i 'interfaces daemon'
```

Search for a complete word with grep

You may notice, **grep** has returned all sorts of results with the word '**network**' , for example networks, networked, networking or abcnetworking, etc. If you want to limit your search to include specific words If so, you must use the **-w** option as follows.

```
ls -l /etc/ | grep -i -w network
```

Search for a specific piece of text in a file

Suppose you have a large file and you want to search for a specific piece of text. The syntax of the command will be as follows.

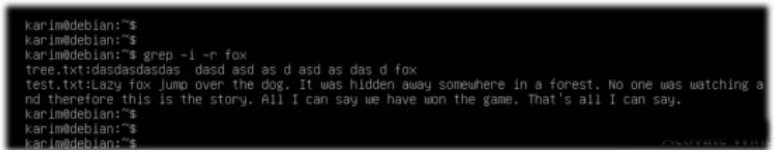
```
grep – i 'v?n b?n b?n mu?n tìm ki?m' 'tên file và ???ng d?n'
```

Do a search in multiple files

If you want to search for a document from a large number of files and subfolders in a large directory, you can do this using the **-r** option **.**

```
grep -i -r "fox"
```

Here is a sample output showing the word **'fox'** included in both **test.txt** and **tree.txt** :



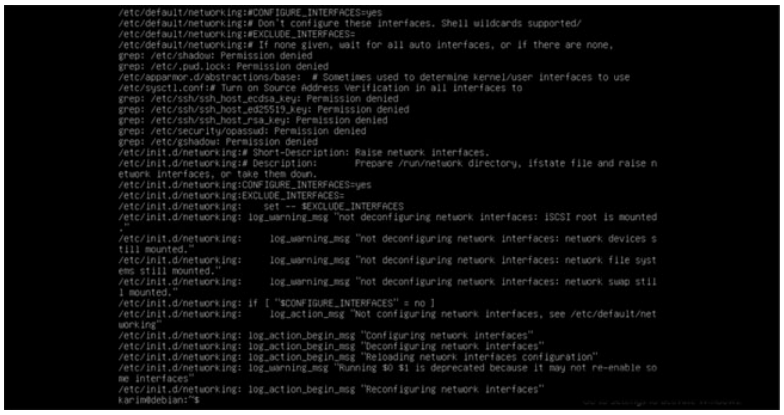
The word 'fox' is found in both test.txt and tree.txt

You can also provide a directory path and it will search all the files in that directory and its subfolders.

Suppose you want to find **'interfaces'** in **/ etc /** and its subfolders. The command should be as follows.

```
grep -i -r interfaces /etc/
```

Here is the sample output:



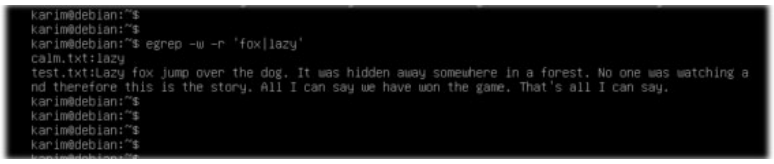
Do a search in multiple files

Search for two different words with a single grep command

You can search for two different words with an **egrep** command (a variant of **grep**) as follows. Let's say you want to search for **fox** and **lazy words** in multiple files with the **-r** option **.** You must run the following command on the terminal.

```
egrep -w -r "fox|lazy"
```

Here is the sample output:



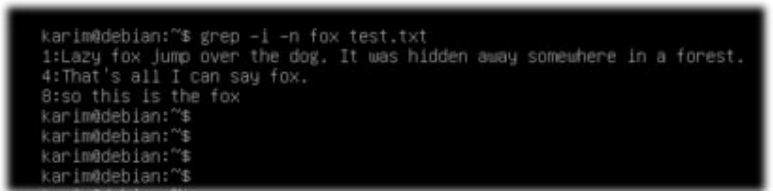
Search for two different words with a single grep command

Number the lines that fit the text

Another useful option is **-n** numbering of lines of text. The following is an example illustrating how to use the **-n** option **.**

```
grep -i -n "fox" test.txt
```

The following is a sample output for the numbering of lines matching the word **'fox'** .



Number the lines that fit the text

Reverse search

This is in contrast to what we did above. If you want to return a text that does not include the word you specify, you can use the **-v** option **.**

The following is an example that illustrates the use of the **-v** option **.**

```
grep -v -i "fox" test.txt
```

Here is the sample output:

Reverse search

All of the above options (**-n** , etc.) can also be applied with the **-v** option **.**

Count matches

If you want to count the number of results that match a specific text, you can use the **-c** option **.**

Count the word **'fox'** in **test.txt** inside the current directory. Run the following command in the terminal:

```
grep -i -c fox test.txt
```

Below is a sample output after executing the above command, showing that the word **'fox'** has appeared 3 times in the **test.txt** file **.**

Count matches

Displays file names that match specific text

If you want to find files containing your specific words, you can use the **-l** option with **-r** as follows.

Assuming all the files are located in the current directory and the specific word you are looking for is **'fox'.**

```
grep -i -r -l fox
```

Here is a sample output showing the word **'fox'** is present in **test.txt** , as well as in the subdirectory and **asif.txt** file:

Displays file names that match specific text

Displays file names that match specific text

Show only matching text

By default, **grep** displays entire lines that match the text or words you want. If you want **grep to** display words that match, you can use the **-o** option as follows.

```
grep -i -o fox test.txt
```

Here is a sample output.

Show only matching text

Display lines starting with specific word (s)

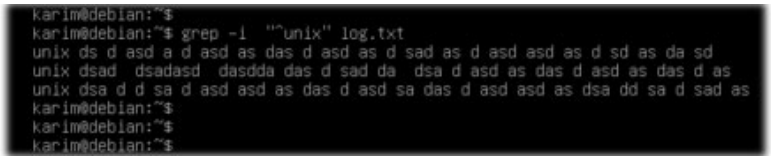
If you want to retrieve all lines starting with a specific word, you can use the ^ operator as follows.

Suppose you want to return all lines beginning with '**unix**' and the file is **log.txt** located in the current directory.

Run the following command in the terminal:

```
grep -i "^unix" log.txt
```

Here is the sample output:



Display lines starting with specific word (s)

Display lines that end with specific word (s)

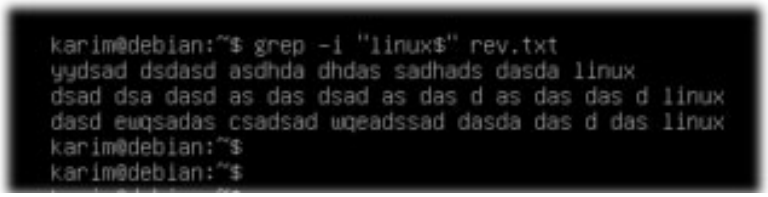
If you want to return all lines from a file ending with a specific word (s), you can use the **$** operator as follows.

Assuming the word is '**linux**' and the file you want to search for is **rev.txt** located in the current directory.

Run the following command:

```
grep -i "linux$" rev.txt
```

Here is the sample output:



Display lines that end with specific word (s)

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