

grep [Global regular expression print]

it is use to search and print lines using any pattern or word or string from any file or from any command output.

Command syntax:

grep <options> <string or word> <filename or location of the file>

OR

<any-xyz-command> | grep <options> <word or string>

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grep root /etc/passwd

grep -n root /etc/passwd

lsblk | grep disk

lsblk | grep -n disk

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Options:

-n ==> with line number

-c ==> line count only but will not print the output

-i ==> ignore case sensitive

-o ==> only pattern

-v ==> invert matching lines

-w ==> exact word matching

-A ==> -A2 ==> after

-B ==> Before

-C ==> Common

^ ==> Beginning of the line

\$ ==> end of the line

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What is the meaning commented lines in any file ?

What is the meaning uncommented or non commented lines in any file ?

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====> if lines started with # ==> called commented lines

====> if lines are not started with # ==> called un commented lines or functioning lines

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Notes

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- 1 cat /etc/passwd
- 2 head /etc/passwd
- 3 head -n 15 /etc/passwd
- 4 tail /etc/passwd
- 5 tail -n 5 /etc/passwd
- 6 sed -n '5p' /etc/passwd
- 7 sed -n '1,5p' /etc/passwd
- 8 grep root /etc/passwd
- 9 wc -l /etc/passwd
- 10 grep ftp /etc/passwd
- 11 grep games /etc/passwd
- 12 grep -n root /etc/passwd
- 13 grep root /etc/passwd
- 14 grep root /etc/passwd > /tmp/report
- 15 cat /tmp/report

```
16 grep root /etc/passwd
17 grep --color root /etc/passwd
18 alias
19 cat /etc/passwd | grep root
20 cat /etc/passwd | grep -n root
21 grep -n root /etc/passwd
22 grep -n root /etc/passwd
23 grep -n ftp /etc/passwd
24 grep -c ftp /etc/passwd
25 grep -c root /etc/passwd
26 grep root /etc/passwd | wc -l
27 grep ftp /etc/passwd | wc -l
28 grep -c root /etc/passwd
29 grep -n root /etc/passwd
30 grep ftp /etc/passwd | wc -l
31 cat /etc/crontab
32 grep minute /etc/crontab
33 grep -n minute /etc/crontab
34 cat /etc/crontab | grep minute
35 cat /etc/crontab | grep -n minute
36 grep root /etc/passwd
37 grep -v root /etc/passwd
38 grep -c root /etc/passwd
39 grep -c -v root /etc/passwd
40 wc -l /etc/passwd
41 grep root /etc/passwd
42 grep root /etc/passwd > /tmp/matching-lines
```

```
43 cat /tmp/matching-lines
44 grep -v root /etc/passwd > /tmp/non-matching-lines
45 cat /tmp/matching-lines
46 cat /tmp/non-matching-lines
47 grep -c -v root /etc/passwd
48 grep -cv root /etc/passwd
49 grep -vc root /etc/passwd
50 grep -n root /etc/passwd
51 grep -n -c root /etc/passwd
52 grep -n root /etc/passwd
53 grep -c root /etc/passwd
54 cat /etc/passwd
55 grep dhcp /etc/passwd
56 grep -i dhcp /etc/passwd
57 grep -i Dhcp /etc/passwd
58 grep dns /etc/passwd
59 grep -i dns /etc/passwd
60 grep root /etc/passwd
61 grep -i root /etc/passwd
62 grep -i ROOT /etc/passwd
63 grep ROOT /etc/passwd
64 grep -i ROOT /etc/passwd
65 grep ssh /etc/passwd
66 grep -i ssh /etc/passwd
67 grep root /etc/passwd
68 grep -o root /etc/passwd
69 grep ftp /etc/passwd
```

```
70 grep -o ftp /etc/passwd
71 grep -o root /etc/passwd
72 grep -o root /etc/passwd > /tmp/string
73 cat /tmp/string
74 grep -i -n -o root /etc/passwd
75 grep -i -o root /etc/passwd
76 grep -i -n -o root /etc/passwd
77 grep -ino root /etc/passwd
78 cat /var/log/secure
79 grep pam_unix /var/log/secure
80 grep pam_unix /var/log/secure > /tmp/match
81 grep -v pam_unix /var/log/secure > /tmp/non-match
82 cat /tmp/match
83 cat /tmp/non-match
84 useradd manish
85 useradd manisha
86 tail -n 2 /etc/passwd
87 grep manisha /etc/passwd
88 grep manish /etc/passwd
89 grep -w manish /etc/passwd
90 cat /etc/services
91 grep rsync /etc/services
92 grep airsnc /etc/services
93 grep -w rsync /etc/services
94 grep 873 /etc/services
95 grep -w 873 /etc/services
96 grep ibus /etc/services
```

```
97 grep -i ibus /etc/services
98 grep -i -w ibus /etc/services
99 grep -i -w -o ibus /etc/services
100 grep -i -w -o ibus /etc/services | grep -v iBus
101 grep ftp /etc/passwd
102 grep -n ftp /etc/passwd
103 grep -A2 -n ftp /etc/passwd
104 grep -A3 -n ftp /etc/passwd
105 grep -B2 -n ftp /etc/passwd
106 grep -C2 -n ftp /etc/passwd
107 lsblk | grep disk
108 lsblk | grep -n disk
109 lsblk | grep -n -A1 disk
110 lsblk | grep -n -B1 disk
111 lsblk | grep -n -C1 disk
112 grep -n -A2 root /etc/passwd
113 grep root /etc/passwd
114 grep ^root /etc/passwd
115 grep ftp /etc/passwd
116 grep ^ftp /etc/passwd
117 grep bash$ /etc/passwd
118 grep nologin$ /etc/passwd
119 grep -c nologin$ /etc/passwd
120 grep -c bash$ /etc/passwd
121 grep root /etc/passwd
122 grep "root" /etc/passwd
123 grep 'root' /etc/passwd
```

```
124 grep root /etc/passwd
125 cat /etc/passwd
126 grep "DHCP and DNS" /etc/passwd
127 grep -i "DHCP and DNS" /etc/passwd
128 grep -i 'DHCP and DNS' /etc/passwd
129 grep manisha /etc/passwd
130 grep "manisha" /etc/passwd
131 cat /etc/passwd
132 grep -i "User for cockpit" /etc/passwd
133 grep -i "User for cockpit web service" /etc/passwd
134 grep ^root /etc/passwd
135 grep "^root" /etc/passwd
136 grep "bash$" /etc/passwd
137 grep root /etc/passwd
138 grep "root" /etc/passwd
139 lsblk
140 lsblk | cat -n
141 lsblk | cat -n | grep -i swap
142 lsblk | cat -n | grep -i -n swap
143 lsblk | grep -i -n swap
144 lsblk | grep boot
145 dmidecode
146 dmidecode | grep bios
147 dmidecode | grep -i bios
148 dmidecode | grep -i smbios
149 dmidecode | grep -i smbios | tail -n1
150 dmidecode | grep -i smbios | head -n1
```

```
151 cat /etc/default/useradd
152 grep -i home /etc/default/useradd
153 grep -i skel /etc/default/useradd
154 grep -i skel /etc/default
155 grep -i skel /etc/default/*
156 grep -i -n skel /etc/default/*
157 grep -i -R skel /etc/default → search recursively
158 grep -i skel /etc/default
159 grep root /etc/passwd
160 grep ftp /etc/passwd
161 grep games /etc/passwd
162 egrep "root|ftp|games" /etc/passwd → use egrep for multiple searching
163 egrep -n -i "root|ftp|games" /etc/passwd
164 grep -E -n -i "root|ftp|games" /etc/passwd
165 grep -e "root" -e "ftp" -e "games" /etc/passwd
166 grep -E -n -i "root|ftp|games" /etc/passwd
167 egrep -n -i "root|ftp|games" /etc/passwd
168 lsblk
169 lsblk | grep boot
170 lsblk | grep -i swap
171 lsblk | grep -i -e "swap" -e "boot"
172 lsblk | grep -i -E "swap|boot"
173 lsblk | egrep -i "swap|boot"
174 rpm -qa
175 rpm -qa tree
176 rpm -qa zip
177 rpm -qa | grep "tar"
```


178 rpm -qa | grep "zip"

179 rpm -qa | grep -w "zip"

180 rpm -qa | grep -w "tar"

181 rpm -qa | grep -w "tar|zip"

182 rpm -qa | egrep -w "tar|zip"

183 rpm -qa | grep -E -w "tar|zip"

184 rpm -qa | grep -w -e tar -e zip

185 ifconfig

186 ifconfig | grep inet

187 ifconfig | grep -w inet

188 ifconfig | grep ether

189 ifconfig | grep -e ether -e inet

190 ifconfig | grep -w -e ether -e inet

191 ifconfig | grep -w -e ether -e inet | head -n 2

192 ifconfig | grep -w -E "ether|inet" | head -n 2

193 ifconfig | grep -w -e ether -e inet | head -n 2

194 **fgrep** root /etc/passwd /etc/group /etc/crontab → we don't need to use fgrep command these days , fgrep features are added to the grep command .but we have to use egrep cmd during the search of multiple pattern.

195 fgrep -n root /etc/passwd /etc/group /etc/crontab

196 grep -F -n root /etc/passwd /etc/group /etc/crontab

197 grep -n root /etc/passwd /etc/group /etc/crontab

198 grep -F -n "root|games|ftp" /etc/passwd /etc/group /etc/crontab

199 grep -n "root|games|ftp" /etc/passwd /etc/group /etc/crontab

200 fgrep -n "root|games|ftp" /etc/passwd /etc/group /etc/crontab

201 egrep -n "root|games|ftp" /etc/passwd /etc/group /etc/crontab

202 grep -E -n "root|games|ftp" /etc/passwd /etc/group /etc/crontab

203 grep games /etc/passwd /etc/group /etc/shadow

204 `grep -E "games|ftp" /etc/passwd /etc/group /etc/shadow`

205 `ls`

206 `ls | grep ana`

207 `ls /etc`

208 `ls /etc | grep crontab`

209 `find / -name crontab`

210 `find / -name useradd`

211 `find / -name useradd`

212 `cat /etc/default/useradd`

213 `grep -i skel /etc/default/useradd`

214 `touch /tmp/abc`

215 `ls /`

216 `find / -name abc`

217 `ls /tmp`

218 `ls /tmp | grep abc`

219 `grep -o root /etc/passwd`

220 `grep -o root /etc/passwd | uniq`

221 `grep -o root /etc/passwd | uniq -c`

222 `grep -o root /etc/passwd | uniq`

223 `grep -E -o "root|ftp|games" /etc/passwd`

224 `grep -E -o "root|ftp|games" /etc/passwd | uniq`

225 `grep -E -o "root|ftp|games" /etc/passwd | uniq -c`

226 `cat /etc/crontab`

227 `cat /etc/passwd`

228 `cat /etc/sudoers`

229 `cat /etc/crontab`

230 `echo "#karinakapoor"`

```
231 echo "#karinakapoor" >> /etc/crontab
232 cat /etc/crontab
233 echo "#this programe is developred by Mr.krishna" >> /etc/crontab
234 cat /etc/crontab
235 ls
236 #ls
237 echo hello
238 #echo command is used to print any mesg
239 cat /etc/crontab
240 grep ^# /etc/crontab
241 grep ^[#] /etc/crontab
242 grep ^[^#] /etc/crontab
243 grep ^[#] /etc/crontab > /tmp/commented-lines
244 grep ^[^#] /etc/crontab > /tmp/un-commented-lines
245 cat /tmp/commented-lines
246 cat /tmp/un-commented-lines
247 grep ^# /etc/passwd
248 grep ^# /etc/crontab
249 grep -v ^# /etc/crontab
250 grep ^[#] /etc/crontab
251 grep ^[^#] /etc/crontab
252 cat -n /etc/crontab
253 sed -n '3p' /etc/crontab
254 sed '3s/^\#/' /etc/crontab
255 cat /etc/crontab
256 sed -i '3s/^\#/' /etc/crontab
257 cat /etc/crontab
```

258 cat -n /etc/crontab

259 sed -i '3s/^#/' /etc/crontab → by default sed cmd only show changes in output but not original content of file . To change original content we have to use -i option.

260 cat -n /etc/crontab

261 cat -n /etc/crontab

262 sed '1,3s/^#/' /etc/crontab

263 cat -n /etc/crontab

264 sed -i '1,3s/^#/' /etc/crontab

265 cat -n /etc/crontab

266 sed -i '1,3s/^#/' /etc/crontab

267 cat -n /etc/crontab

268 cat -n /etc/sudoers

269 sed -n '100p' /etc/sudoers

270 sed '100s/^#/' /etc/sudoers

271 sed -i '100s/^#/' /etc/sudoers

272 sed -n '100p' /etc/sudoers

273 sed -i '100s/^#/' /etc/sudoers

274 sed -n '100p' /etc/sudoers

275 ifconfig

276 ifconfig | grep inet

277 ifconfig | grep -w inet

278 ifconfig | grep -w inet | head -n 1

279*

280 ifconfig | grep -w inet | head -n 1 | awk '{print \$2}'

281 ifconfig

282 ifconfig | awk '{print \$2}'

283 ifconfig | awk '{print \$2}' | head -n 2

```

284 ifconfig | awk '{print $2}' | head -n 2 | tail -n1
285 ifconfig | grep -w inet
286 ifconfig | grep -w inet | head -n1
287 ifconfig | grep -w inet | head -n1 | awk '{print $2}'
288 ifconfig | grep ether
289 ifconfig | grep ether | awk '{print $2}'
290 echo date
291 echo $(date)
292 a=$(date)
293*
294 ifconfig | grep -w inet | head -n1 | awk '{print $2}'
295 ifconfig | grep ether | awk '{print $2}'
296 a=$(ifconfig | grep -w inet | head -n1 | awk '{print $2}')
297 b=$(ifconfig | grep ether | awk '{print $2}')
298 echo $a
299 echo $b
300 echo "IP address of this machine is = $a and MAC address of this machine is = $b"

```

```
[root@localhost ~]# lscpu | grep -i "model name"
```

```
Model name: Intel(R) Xeon(R) CPU E3-1225 v5 @ 3.30GHz
```

```
BIOS Model name: Intel(R) Xeon(R) CPU E3-1225 v5 @ 3.30GHz
```

```
[root@localhost ~]# lscpu | grep -i "bios model name"
```

```
BIOS Model name: Intel(R) Xeon(R) CPU E3-1225 v5 @ 3.30GHz
```

```
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```

```
cat + tac + wc + head + tail + sed + cut + awk + uniq + grep + egrep + fgrep
```

```
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```

