

24L-0583

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1. diff:

compares the contents of two files or directories line by line and outputs the differences

```
iuser@iuser-virtual-machine:~$ !!
diff hello.c hi2.c
5c5
< print ("Hello Asjad!");
---
> printf("Hiiiiiiii");
8d7
<
iuser@iuser-virtual-machine:~$
```

2. cmp:

compares two files byte by byte

```
iuser@iuser-virtual-machine:~$ cmp hello.c hi2.c
hello.c hi2.c differ: byte 39, line 5
iuser@iuser-virtual-machine:~$
```

3. echo:

displays the given argument on the console

```
iuser@iuser-virtual-machine:~$ echo ECHO DISPLAYS THE ARGUMENT TEXT ON THE CONSOLE
ECHO DISPLAYS THE ARGUMENT TEXT ON THE CONSOLE
iuser@iuser-virtual-machine:~$
```

4. uname:

displays the unix name

```
iuser@iuser-virtual-machine:~$ uname
Linux
iuser@iuser-virtual-machine:~$
```

5. whoami:

displays the current username

```
iuser@iuser-virtual-machine:~$ whoami  
iuser  
iuser@iuser-virtual-machine:~$ █
```

6. sort:

display the content of file on console.

```
iuser@iuser-virtual-machine:~$ cat > 2.txt
Rehan
Ali
Asjad
Shaheer
Dawar
^C
iuser@iuser-virtual-machine:~$ sort 2.txt
Ali
Asjad
Dawar
Rehan
Shaheer
iuser@iuser-virtual-machine:~$
```

7. sort input > output:

it sorts the content of the input file and saves it in a new output file.

```
iuser@iuser-virtual-machine:~$ sort 1.txt > n1.txt  
iuser@iuser-virtual-machine:~$ sort 2.txt > n2.txt
```

8 sort -o file file

sort the content of the file and overwrite it

```
iuser@iuser-virtual-machine:~$ sort -o n1.txt n1.txt  
iuser@iuser-virtual-machine:~$
```

9. comm file1 file2:

compares two sorted files line by line and produces a three-column output that identifies lines unique to each file and lines common to both

```
iuser@iuser-virtual-machine:~$ comm n1.txt n2.txt
Ahmad
      Ali
      Asjad
Dawar
      Rehan
      Shaheer
iuser@iuser-virtual-machine:~$
```

10. ps:

display a snapshot of the currently running processes on the system

```
iuser@iuser-virtual-machine:~$ ps
  PID TTY      TIME CMD
 2651 pts/0    00:00:00 bash
 5700 pts/0    00:00:00 ps
iuser@iuser-virtual-machine:~$
```

11. df:

display information about disk space usage on mounted file systems

```
iuser@iuser-virtual-machine:~$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
tmpfs            396452     1716    394736   1% /run
/dev/sda3        50967300 19625984  29097116  41% /
tmpfs            1982256       0    1982256   0% /dev/shm
tmpfs             5120        4     5116   1% /run/lock
tmpfs            1982256       0    1982256   0% /run/qemu
/dev/sda2         524252     6220    518032   2% /boot/efi
tmpfs            396448      116    396332   1% /run/user/1000
iuser@iuser-virtual-machine:~$
```

12. cal:

displays calender on console

```
iuser@iuser-virtual-machine:~$ cal
جنوری 2026
ك بی من بد جم جم
 1 2 3
4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

13. whereis

displays the location of the command searched

```
iuser@iuser-virtual-machine:~$ whereis ls
ls: /usr/bin/ls /usr/share/man/man1/ls.1.gz
iuser@iuser-virtual-machine:~$ whereis sudo
sudo: /usr/bin/sudo /usr/libexec/sudo /usr/share/man/man8/sudo.8.gz
iuser@iuser-virtual-machine:~$
```

14. date

displays current date and time on the console

```
iuser@iuser-virtual-machine:~$ date
15:53:07 و PKT 2026 جنوری 30 ت
iuser@iuser-virtual-machine:~$
```

15. lspci

displays information about ports on the motherboard

```
iuser@iuser-virtual-machine: ~ $ lspci
00:00.0 Host bridge: Intel Corporation 440BX/ZX/DX - 82443BX/ZX/DX Host bridge (rev 01)
00:01.0 PCI bridge: Intel Corporation 440BX/ZX/DX - 82443BX/ZX/DX AGP bridge (rev 01)
00:07.0 ISA bridge: Intel Corporation 82371AB/EB/MB PIIX4 ISA (rev 08)
00:07.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)
00:07.3 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)
00:07.7 System peripheral: VMware Virtual Machine Communication Interface (rev 10)
00:0f.0 VGA compatible controller: VMware SVGA II Adapter
00:10.0 SCSI storage controller: Broadcom / LSI 53c1030 PCI-X Fusion-MPT Dual Ultra320 SCSI (rev 01)
00:11.0 PCI bridge: VMware PCI bridge (rev 02)
00:15.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:15.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:16.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:17.7 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.0 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.1 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.2 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.3 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.4 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.5 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.6 PCI bridge: VMware PCI Express Root Port (rev 01)
00:18.7 PCI bridge: VMware PCI Express Root Port (rev 01)
02:00.0 USB controller: VMware USB1.1 UHCI Controller
02:01.0 Ethernet controller: Advanced Micro Devices, Inc. [AMD] 79c970 [PCnet32 LANCE] (rev 10)
02:02.0 Multimedia audio controller: Ensoniq ES1371/ES1373 / Creative Labs CT2518 (rev 02)
02:03.0 USB controller: VMware USB2 EHCI Controller
02:04.0 SATA controller: VMware SATA AHCI controller
iuser@iuser-virtual-machine: ~ $
```