

```
archit_2004@ARCHIT:~/file_s ~ + | x
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

archit_2004@ARCHIT:~$ gcc --version
Command 'gcc' not found, but can be installed with:
sudo apt install gcc
archit_2004@ARCHIT:~$ sudo apt update
[sudo] password for archit_2004:
Hit:1 http://archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1305 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [215 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [9336 B]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [906 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [203 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.2 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [19.4 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [2135 kB]
Get:15 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [485 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:17 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [500 B]
Get:18 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [27.4 kB]
Get:19 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [5708 B]
Get:20 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:21 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [384 B]
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archit_2004@ARCHIT:~/file_s ~ + | x
Setting up libheif-plugin-libde265:amd64 (1.17.6-1ubuntu4.1) ...
Setting up libheif-plugin-aomenc:amd64 (1.17.6-1ubuntu4.1) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
Processing triggers for man-db (2.12.0-4build2) ...
archit_2004@ARCHIT:~$ ^C
archit_2004@ARCHIT:~$ gcc --version
gcc (Ubuntu 13.3.0-6ubuntu2~24.04) 13.3.0
Copyright (C) 2023 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

archit_2004@ARCHIT:~$ mkdir file_sharing_project
archit_2004@ARCHIT:~$ cd file_sharing_project
archit_2004@ARCHIT:~/file_sharing_project$ nano server.c
archit_2004@ARCHIT:~/file_sharing_project$ gcc server.c -o server
archit_2004@ARCHIT:~/file_sharing_project$ ./server
Server listening on port 8080...
Client connected.
Client requested file: test.txt
File sent successfully.
archit_2004@ARCHIT:~/file_sharing_project$ ./server
Server listening on port 8080...
Client connected.
Client requested file: test.txt
File sent successfully.
archit_2004@ARCHIT:~/file_sharing_project$ ./server
Server listening on port 8080...
Client connected.
```

```
archit_2004@ARCHIT:~/file_s ~ + | x
Get:55 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:56 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 38.6 MB in 11s (3419 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
64 packages can be upgraded. Run 'apt list --upgradable' to see them.
archit_2004@ARCHIT:~$ sudo apt install gcc
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  cpp cpp-13 cpp-13-x86-64-linux-gnu cpp-x86-64-linux-gnu gcc-13 gcc-13-base gcc-13-x86-64-linux-gnu
  gcc-x86-64-linux-gnu libaom3 libasan8 libatomic1 libc-bin libc-dev-bin libc-dev-tools libc6 libc6-dev libcc1-0
  libcrypt-dev libde265-0 libgcc-13-dev libgd3 libgomp1 libheif-plugin-aomenc libheif-plugin-aomenc
  libheif-plugin-libde265 libheif1 libhwasan0 libisl23 libitm1 liblsan0 libmpc3 libquadmath0 libtsan2 libubsan1
  libxpm4 linux-libc-dev locales manpages-dev rpcsvc-proto
Suggested packages:
  cpp-doc gcc-13-locales cpp-13-doc gcc-multilib make autoconf automake libtool flex bison gdb gcc-doc gcc-13-multilib
  gcc-13-doc gdb-x86-64-linux-gnu glibc-doc libnss-nis libnss-nisplus libgd-tools libheif-plugin-x265
  libheif-plugin-ffmpegdec libheif-plugin-jpegdec libheif-plugin-jpegenc libheif-plugin-j2kdec libheif-plugin-j2kenc
  libheif-plugin-rav1e libheif-plugin-svtenc
The following NEW packages will be installed:
  cpp cpp-13 cpp-13-x86-64-linux-gnu cpp-x86-64-linux-gnu gcc gcc-13 gcc-13-base gcc-13-x86-64-linux-gnu
  gcc-x86-64-linux-gnu libaom3 libasan8 libatomic1 libc-dev-bin libc-dev-tools libc6-dev libcc1-0 libcrypt-dev
  libde265-0 libgcc-13-dev libgd3 libgomp1 libheif-plugin-aomenc libheif-plugin-aomenc libheif-plugin-libde265
  libheif1 libhwasan0 libisl23 libitm1 liblsan0 libmpc3 libquadmath0 libtsan2 libubsan1 libxpm4 linux-libc-dev
  manpages-dev rpcsvc-proto
The following packages will be upgraded:
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archit_2004@ARCHIT:~/file_s × + ▾
archit_2004@ARCHIT:~$ mkdir file_sharing_project
mkdir: cannot create directory 'file_sharing_project': File exists
archit_2004@ARCHIT:~$ cd file_sharing_project
archit_2004@ARCHIT:~/file_sharing_project$ nano client.c
archit_2004@ARCHIT:~/file_sharing_project$ gcc client.c -o client
archit_2004@ARCHIT:~/file_sharing_project$ ./client
Connected to server.
Files available on server:
server.c
client
client.c
server

Enter file name to download: test.txt
File downloaded successfully as test.txt
archit_2004@ARCHIT:~/file_sharing_project$ ./client
Connected to server.
Files available on server:
test.txt
server.c
client
client.c
server
```

```
archit_2004@ARCHIT:~/file_s × + ▾
archit_2004@ARCHIT:~$ cd ~/file_share_project
-bash: cd: /home/archit_2004/file_share_project: No such file or directory
archit_2004@ARCHIT:~$ cd ~/file_sharing_project
archit_2004@ARCHIT:~/file_sharing_project$ ls
client client.c server server.c test.txt
archit_2004@ARCHIT:~/file_sharing_project$ mkdir test.txt
mkdir: cannot create directory 'test.txt': File exists
archit_2004@ARCHIT:~/file_sharing_project$ rm -r test.txt
archit_2004@ARCHIT:~/file_sharing_project$ ls
client client.c server server.c test.txt
archit_2004@ARCHIT:~/file_sharing_project$ echo "Hello Wipro" > test.txt
-bash: test.txt: Is a directory
archit_2004@ARCHIT:~/file_sharing_project$ rm -r test.txt
archit_2004@ARCHIT:~/file_sharing_project$ touch test.txt
archit_2004@ARCHIT:~/file_sharing_project$ echo "Hello Wipro" > test.txt
archit_2004@ARCHIT:~/file_sharing_project$
```

```
archit_2004@ARCHIT:~/file_s × + ▾
archit_2004@ARCHIT:~$ cd ~/file_sharing_project
archit_2004@ARCHIT:~/file_sharing_project$ nano client.c
archit_2004@ARCHIT:~/file_sharing_project$ gcc client.c -o client
archit_2004@ARCHIT:~/file_sharing_project$ ./client
Connection failed: Connection refused
archit_2004@ARCHIT:~/file_sharing_project$ ./client
Connected to server.
Files available on server:
test.txt
server.c
client
client.c
server

Enter file name to download: |
```