Experiment No : 7

Aim : Build and install software from source code, familiarity with make and cmake utilities expected.

Step 1: Get The Server Ready

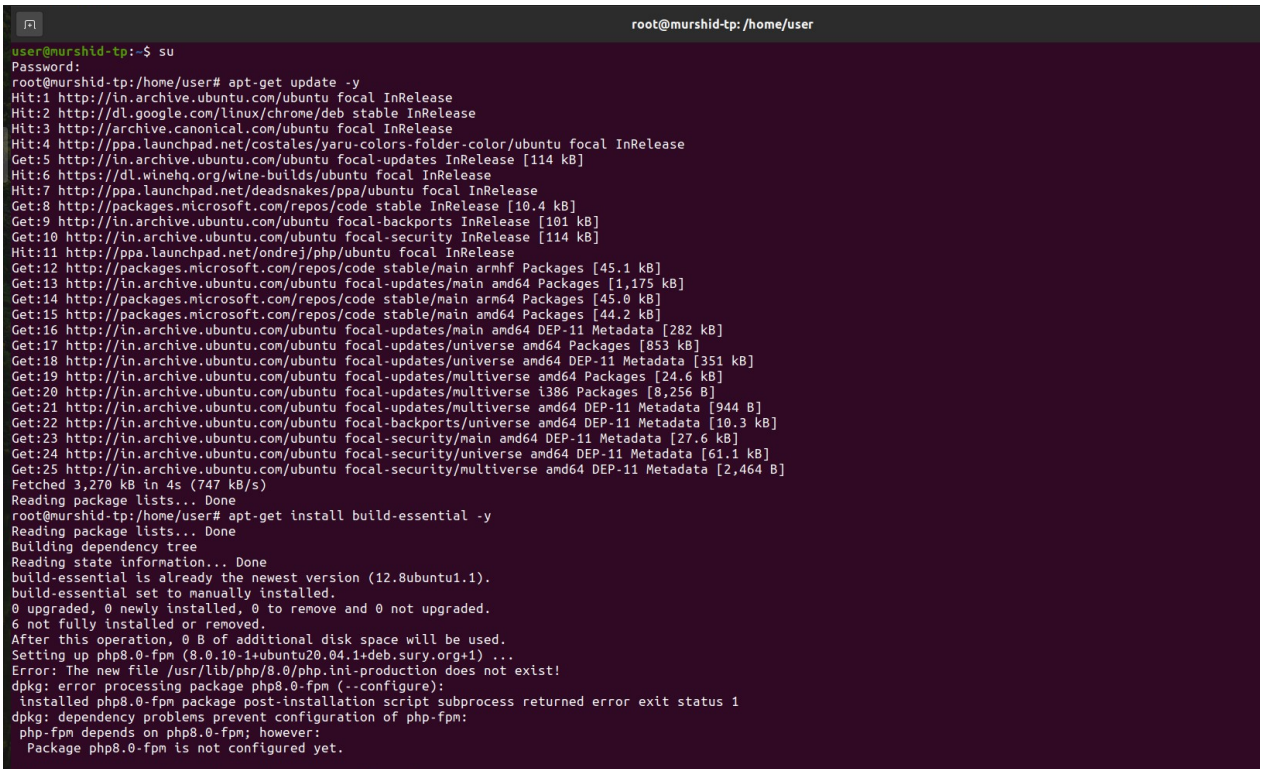
First change the user to super user by **su** command

As a best practice, make sure your packages are up to date:

apt-get update -y

Next, you'll need to make sure you have a compiler available. Run this command to install build-essential:

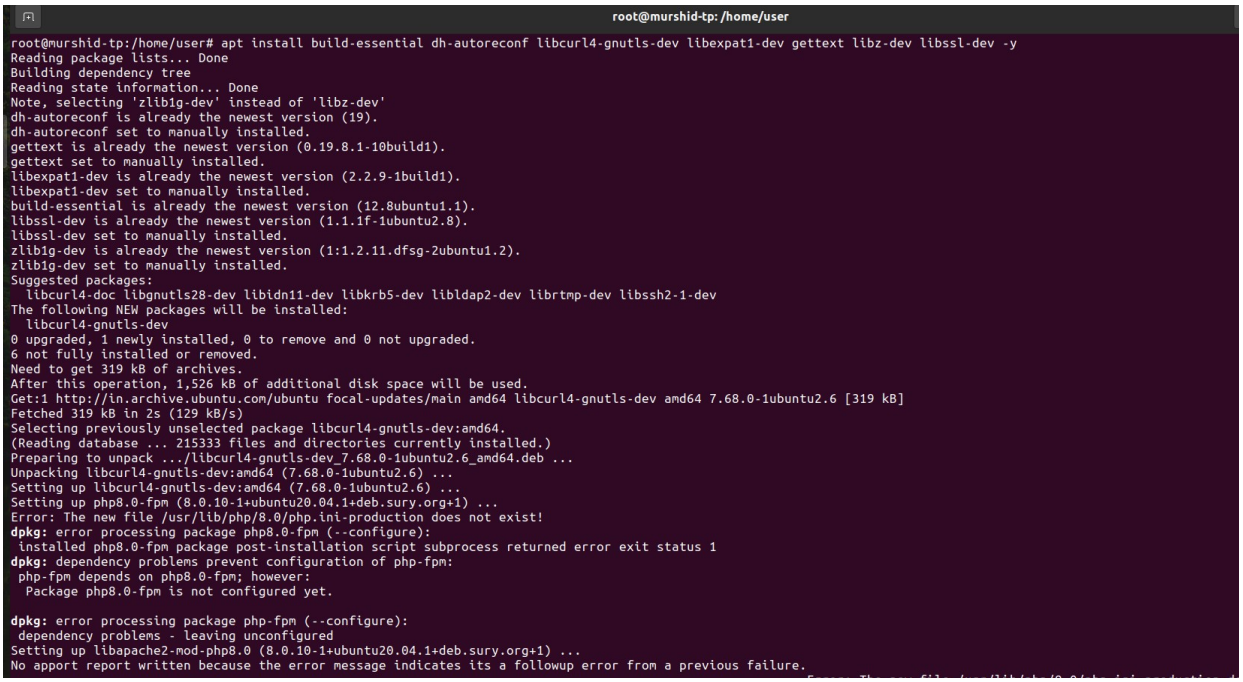
apt-get install build-essential -y



Step 2: Download Dependencies

When installing a package from source code, you'll need to manage the installation of the package dependencies. We'll use **apt-get** to install git's dependencies:

apt install build-essential dh-autoreconf libcurl4-gnutls-dev libexpat1-dev gettext libz-dev libssl-dev -y



Step 3: Download The Source Package

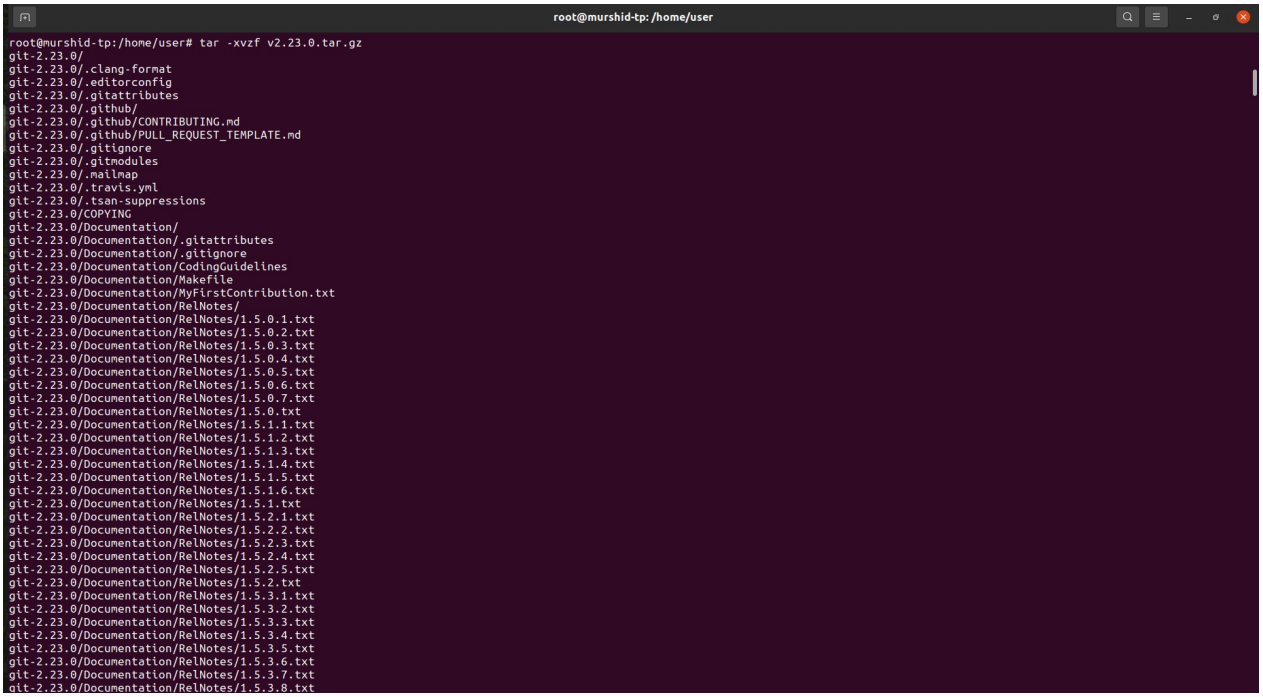
Once the package dependencies are in place, it's time to download the package with wget:

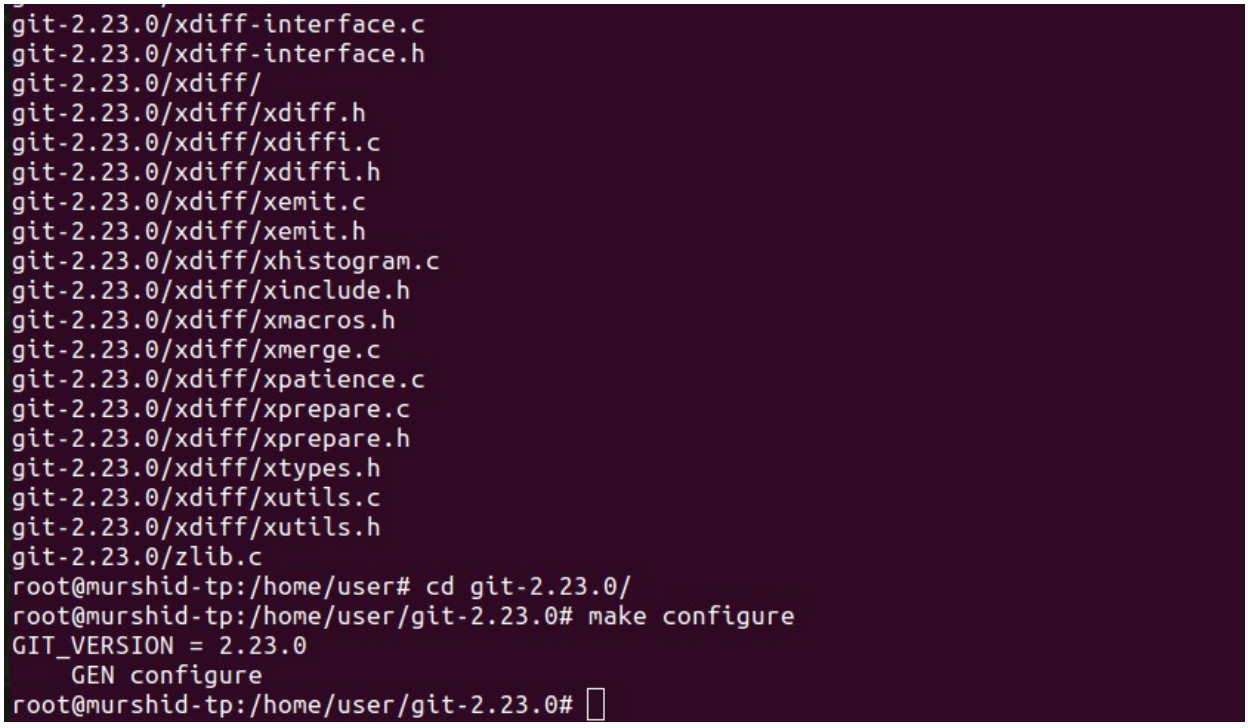
We download git **v2.23.0** by using the command

wget https://github.com/git/git/archive/v2.23.0.tar.gz

Next, we need to extract the archive and cd (change directories) into the new git directory:

tar -xvzf v2.23.0.tar.gz
cd git-2.23.0/



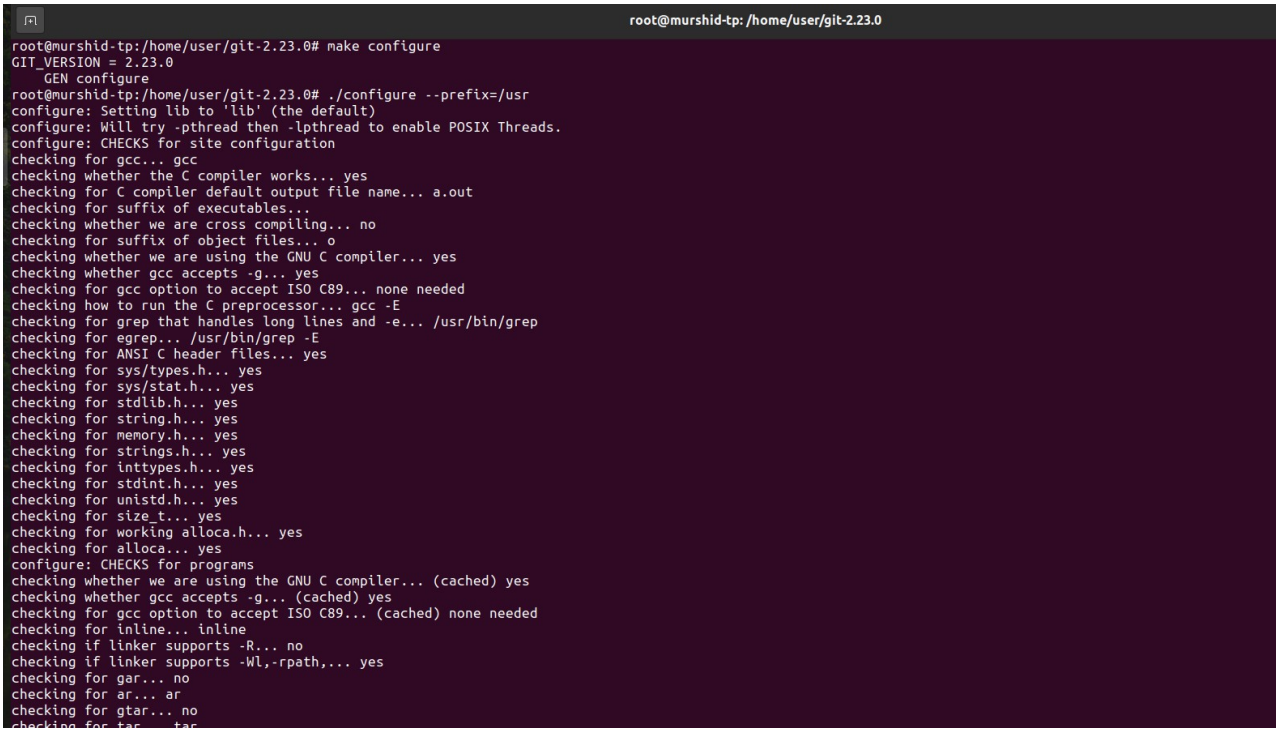


Step 4: Install Git

Now that we have our package extracted and ready to go, we need to configure it: **make configure**

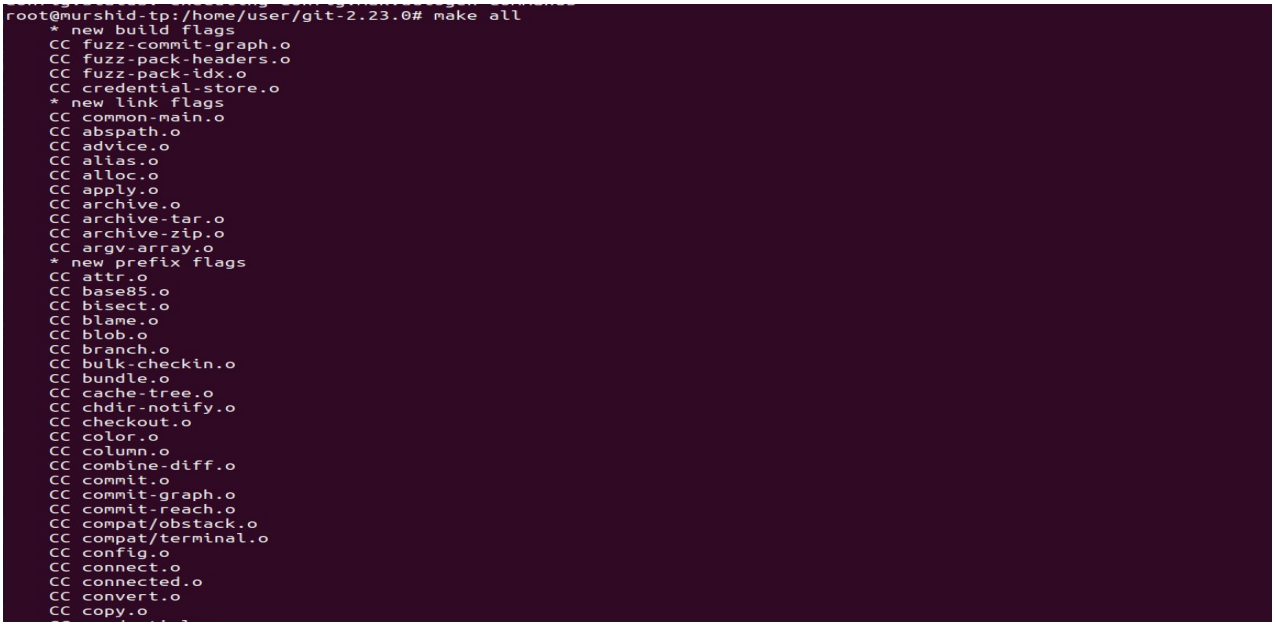
Next, let's verify that all of the dependencies necessary to build the package are available by running this command:

./configure –prefix=/usr



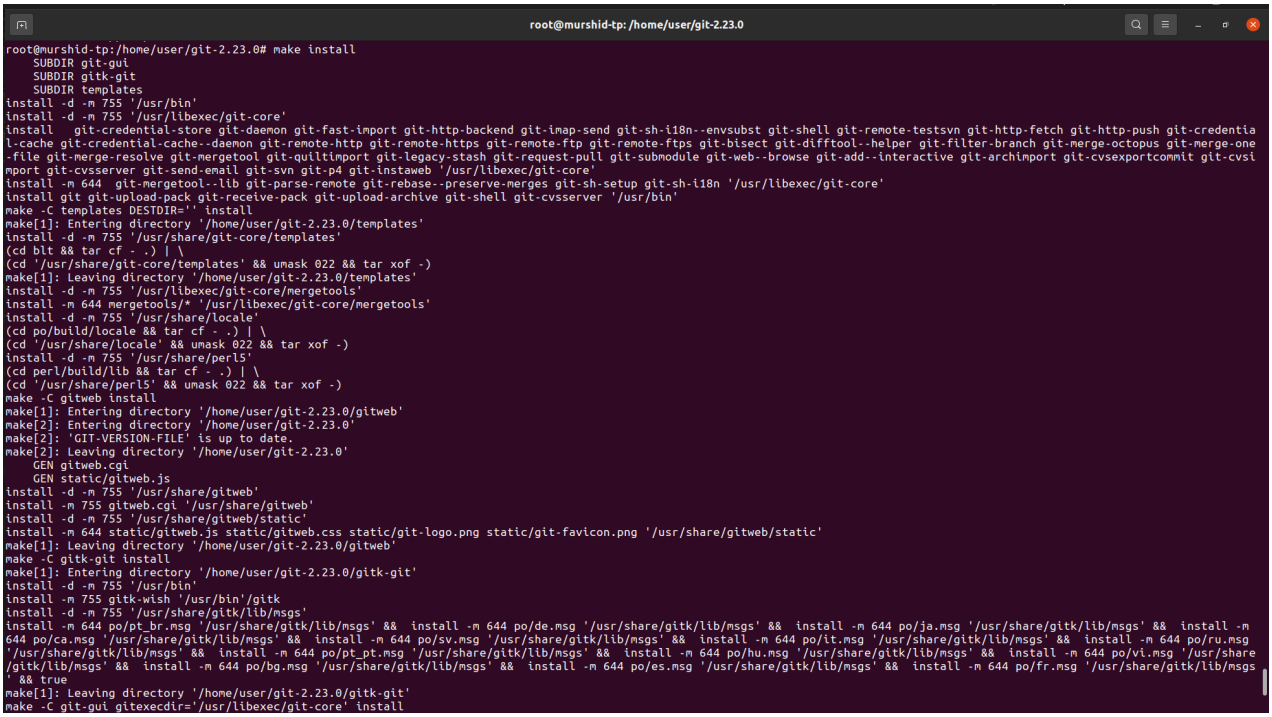
After that, we'll build the source code:

make all



Now that the binaries are all built, its time to install git:

make install



That's it! The last thing to do is to verify that git is working:

git –version