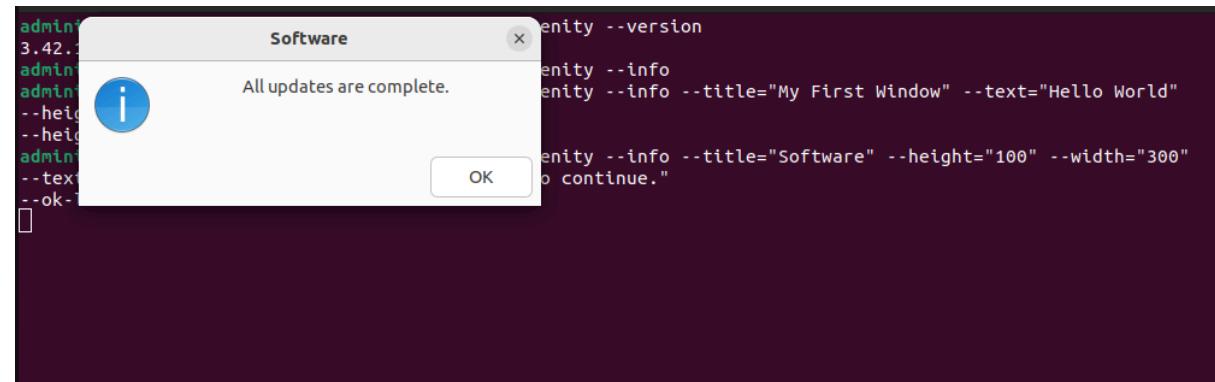


Section 2

```
administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
administrator@administrator-virtual-machine:~$ zenity --info
administrator@administrator-virtual-machine:~$ zenity --info --title="My First Window" --text="Hello World"
--height="100" --width="300"
--height=100: command not found
administrator@administrator-virtual-machine:~$ zenity --info --title="Software" --height="100" --width="300"
--text="Installation is finished. Click Finish to continue."
--ok-label="Finish"
--text=Installation is finished. Click Finish to continue.: command not found
--ok-label=Finish: command not found
administrator@administrator-virtual-machine:~$
```



```
administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
administrator@administrator-virtual-machine:~$ zenity --info
administrator@administrator-virtual-machine:~$ zenity --info --title="My First Window" --text="Hello World"
--height="100" --width="300"
--height=100: command not found
administrator@administrator-virtual-machine:~$ zenity --info --title="Software" --height="100" --width="300"
--text="Installation is finished. Click Finish to continue."
--ok-label="Finish"
--text=Installation is finished. Click Finish to continue.: command not found
--ok-label=Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --question
Administrator@administrator-virtual-machine:~$
```

```
administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
administrator@administrator-virtual-machine:~$ zenity --info
administrator@administrator-virtual-machine:~$ zenity --info --title="My First Window" --text="Hello World"
--height="100" --width="300"
--height=100: command not found
administrator@administrator-virtual-machine:~$ zenity --info --title="Software" --height="100" --width="300"
--text="Installation is finished. Click Finish to continue."
--ok-label="Finish"
--text=Installation is finished. Click Finish to continue.: command not found
--ok-label=Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --question
administrator@administrator-virtual-machine:~$
```

```
Administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
Administrator@administrator-virtual-machine:~$ zenity --info
Administrator@administrator-virtual-machine:~$ zenity --info --title="My First Window" --text="Hello World"
--height="100" --width="300"
--height=100: command not found
Administrator@administrator-virtual-machine:~$ zenity --info --title="Software" --height="100" --width="300"
--text="Installation is finished. Click Finish to continue."
--ok-label="Finish"
--text=Installation is finished. Click Finish to continue.: command not found
--ok-label=Finish: command not found
Administrator@administrator-virtual-machine:~$ zenity --question
Administrator@administrator-virtual-machine:~$ zenity --question --text="Are you happy?"
Administrator@administrator-virtual-machine:~$
```

```
administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
administrator@administrator-virtual-machine:~$ zenity --info
Administrator: Are you sure you want to proceed?
Administrator: Software
Administrator: My First Window
Administrator: Hello World
Administrator: Software
Administrator: 100
Administrator: 300
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --question
administrator@administrator-virtual-machine:~$ zenity --question --text="Are you happy?"
administrator@administrator-virtual-machine:~$ echo $?
1
administrator@administrator-virtual-machine:~$ nano happy.sh
administrator@administrator-virtual-machine:~$ zenity --question --title="Software" --height="100" --width="300"
--text="Are you sure you want to proceed. Click Next to continue."
--ok-label="Next" -cancel-label="Quit"
Administrator: Next
Administrator: Quit
Administrator: Finish
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --version
3.42.1
administrator@administrator-virtual-machine:~$ zenity --info
Administrator: Are you sure you want to proceed?
Administrator: Software
Administrator: My First Window
Administrator: Hello World
Administrator: Software
Administrator: 100
Administrator: 300
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --question
administrator@administrator-virtual-machine:~$ zenity --question --text="Are you happy?"
administrator@administrator-virtual-machine:~$ echo $?
1
administrator@administrator-virtual-machine:~$ nano happy.sh
administrator@administrator-virtual-machine:~$ zenity --question --title="Software" --height="100" --width="300"
--text="Are you sure you want to proceed. Click Next to continue."
--ok-label="Next" -cancel-label="Quit"
Administrator: Next
Administrator: Quit
Administrator: Finish
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --warning
Administrator: An error has occurred.
Administrator: Software
Administrator: Software
Administrator: 100
Administrator: 300
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --error
Administrator: An error has occurred.
Administrator: Software
Administrator: Software
Administrator: 100
Administrator: 300
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
administrator@administrator-virtual-machine:~$ zenity --error --title="Software" --height="100" --width="300"
--text="You don not have sufficient space to install. The
Installation will now terminate."
Administrator: Software
Administrator: Software
Administrator: 100
Administrator: 300
Administrator: Continue.
Administrator: Installation is finished. Click Finish to continue.: command not found
Administrator: Finish: command not found
```

```
admin@3.42.1.1:~$ Software
hine:~$ zenity --version
hine:~$ zenity --info
hine:~$ zenity --info --title="My First Window" --text="Hello World"
hine:~$ zenity --info --title="Software" --height="100" --width="300"
  Finish to continue."
Finish to continue.: command not found

hine:~$ zenity --question
hine:~$ zenity --question --text="Are you happy?"
hine:~$ echo $?
hine:~$ nano happy.sh
hine:~$ zenity --question --title="Software" --height="100" --width="300"
d. Click Next to continue."
  . Click Next to continue.: command not found

hine:~$ zenity --warning
hine:~$ zenity --error
hine:~$ zenity --error --title="Software" --height="100" --width="300"
--text= You don not have sufficient space to install. The
Installation will now terminate."
--text=You don not have sufficient space to install. The
Installation will now terminate.: command not found
administrator@administrator-virtual-machine:$ zenity -text-info
You must specify a dialog type. See 'zenity --help' for details
administrator@administrator-virtual-machine:$ zenity --text-info --title="Software"
--filename="/home/hasanqbal/Desktop/License"
[ ]
```

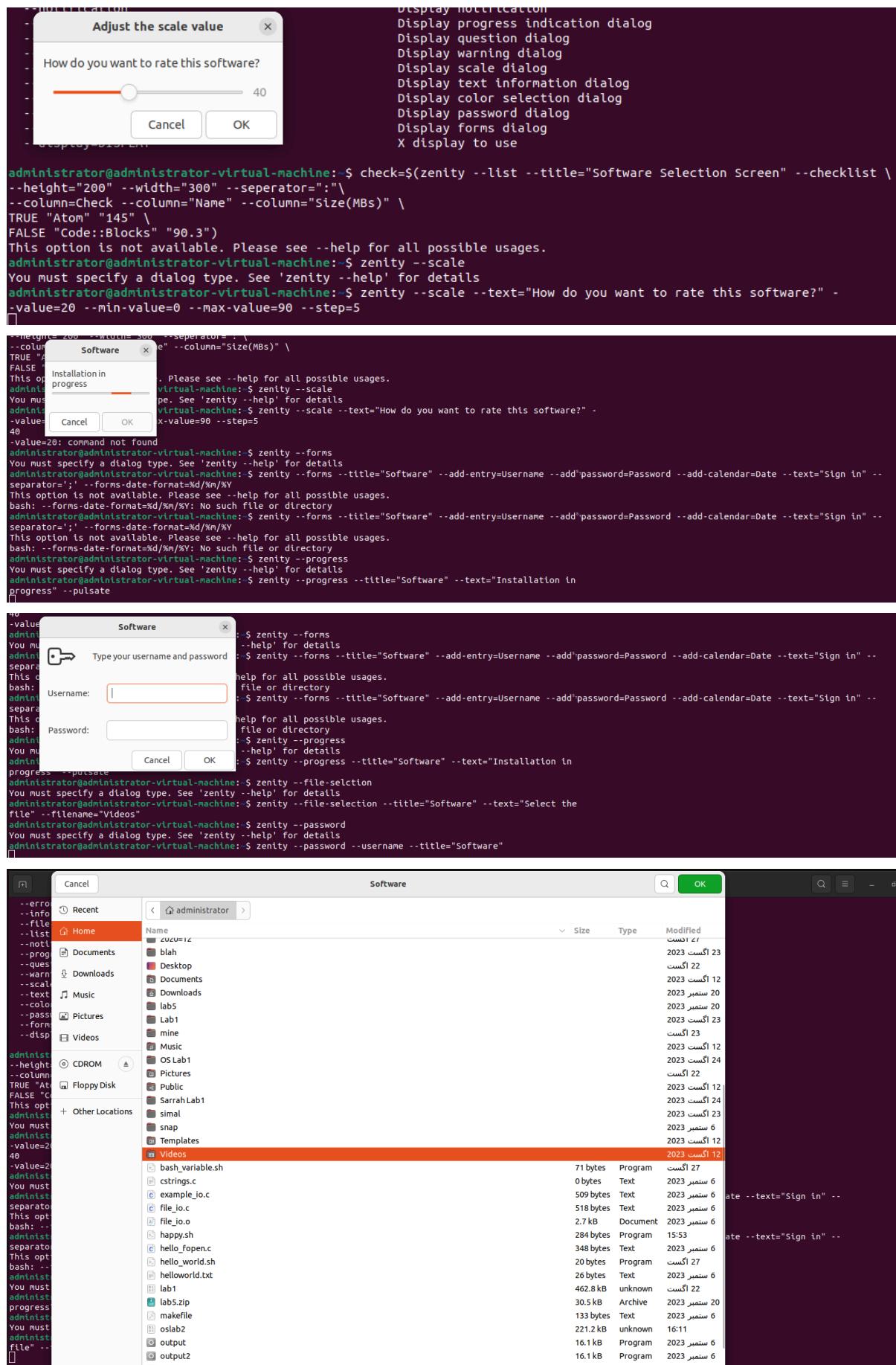


```
administrator@administrator-virtual-machine:$ zenity --error
ad Software
space to install. The
space to install. The
command not found
-machin:~$ zenity -text-info
'zenity --help' for details
-machin:~$ zenity --text-info --title="Software"
p/License"
bash: --filename=/home/hasanqbal/Desktop/License: No such file or directory
administrator@administrator-virtual-machine:$ zenity --entry
You must specify a dialog type. See 'zenity --help' for details
administrator@administrator-virtual-machine:$ a=$(zenity --entry --title="Software" --text="Which software you
want to install?" --height="100" --width="300")
[ ]
```

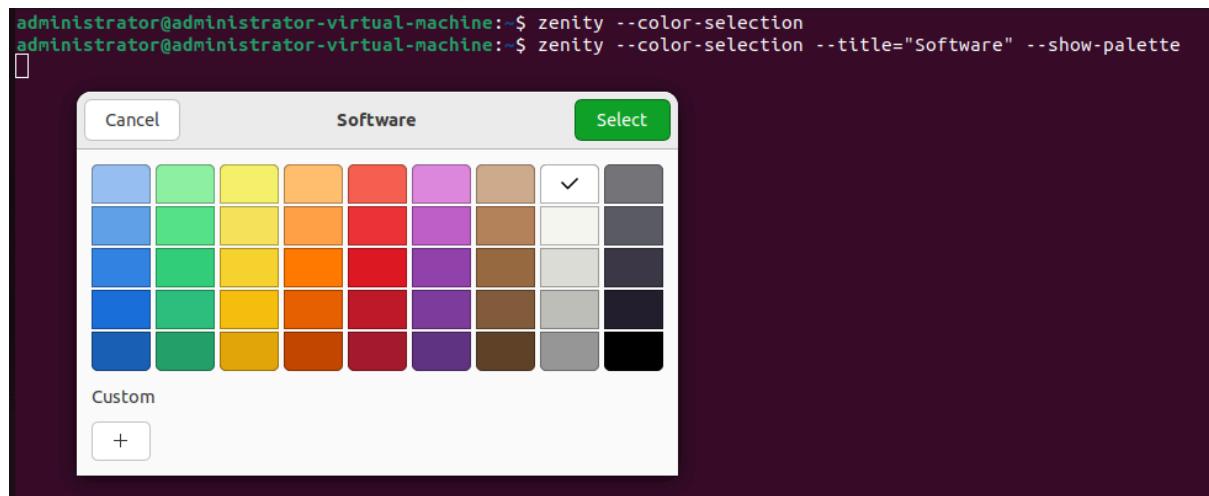
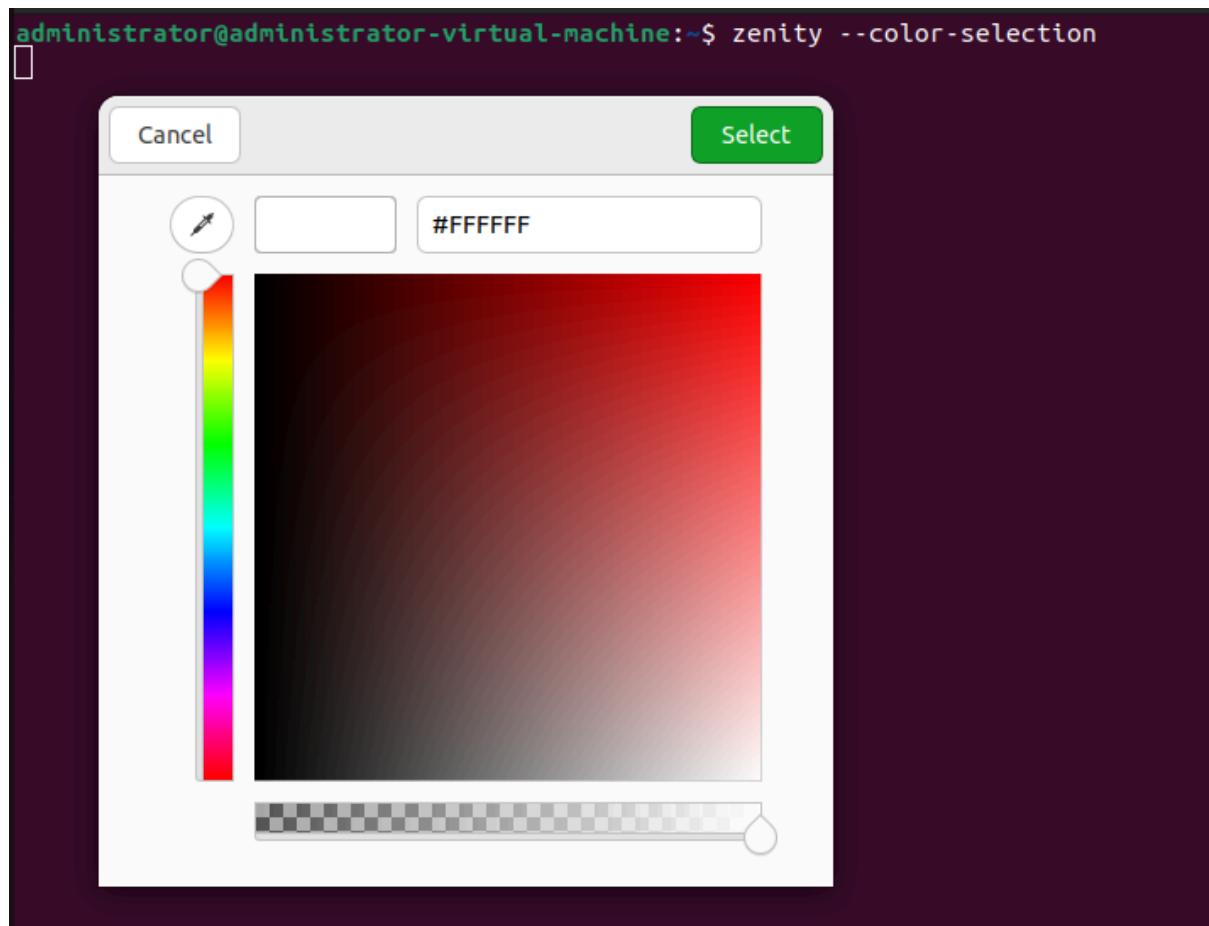


```
l-machine:~$ zenity --error
l-machine:~$ zenity --error --title="Software" --height="100" --width="300"
t space to install. The
space to install. The
command not found
l-machine:~$ zenity -text-info
e 'zenity --help' for details
l-machine:~$ zenity --text-info --title="Software"
op/License"
Desktop/License: No such file or directory
l-machine:~$ zenity --entry
e 'zenity --help' for details
l-machine:~$ a=$(zenity --entry --title="Software" --text="Which software you
want to install?" --height="100" --width="300")
administrator@administrator-virtual-machine:$ echo $a
bree
administrator@administrator-virtual-machine:$ zenity --list --title="Software Selection Screen" --radiolist \
--height="200" --width="300" \
--column=Check --column="Name" --column="Size(MBs)" \
TRUE "Atom" "145" \
FALSE "Code::Blocks" "90.3"
[ ]
```

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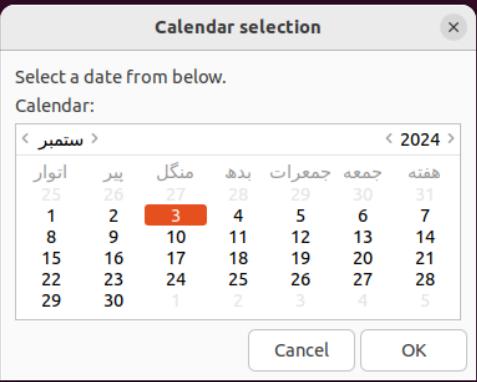


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```
administrator@adminstrator-virtual-machine:~$ zenity --calendar
```



```
administrator@adminstrator-virtual-machine:~$ zenity --calendar --title="Software" --text="When do you want to update the software?" --day=5 --month=12 --year=2019 --format=%d%my
```



```
administrator@adminstrator-virtual-machine:~$ mkdir src; cd src
administrator@adminstrator-virtual-machine:~/src$ wget https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
--2024-09-03 16:29:34-- https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
Resolving ftp.gnu.org (ftp.gnu.org)... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'ftp.gnu.org'
administrator@adminstrator-virtual-machine:~/src$ tar -xzf gnublk-2.4.3.tar.gz
tar (child): gnublk-2.4.3.tar.gz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
tar: Child returned status 2
tar: Error is not recoverable: exiting now
administrator@adminstrator-virtual-machine:~/src$ wget https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
--2024-09-03 16:31:51-- https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
Resolving ftp.gnu.org (ftp.gnu.org)... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'ftp.gnu.org'
administrator@adminstrator-virtual-machine:~/src$ wget https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
--2024-09-03 16:35:12-- https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
Resolving ftp.gnu.org (ftp.gnu.org)... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'ftp.gnu.org'
administrator@adminstrator-virtual-machine:~/src$ wget https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
--2024-09-03 16:37:05-- https://ftp.gnu.org/gnu/gnublk/gnublk-2.4.3.tar.gz
Resolving ftp.gnu.org (ftp.gnu.org)... 209.51.188.20, 2001:470:142:3::b
Connecting to ftp.gnu.org (ftp.gnu.org)|209.51.188.20|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 438451 (428K) [application/x-gzip]
Saving to: 'gnublk-2.4.3.tar.gz'

gnublk-2.4.3.tar.gz          100%[=====] 428.17K   358KB/s   in 1.25s

2024-09-03 16:37:07 (358 KB/s) - 'gnublk-2.4.3.tar.gz' saved [438451/438451]
```

```
administrator@adminstrator-virtual-machine:~/src$
```

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```
administrator@administrator-virtual-machine:~/src$ tar -xzf gnubik-2.4.3.tar.gz
administrator@administrator-virtual-machine:~/src$ tree gnubik-2.4.3
Command 'tree' not found, but can be installed with:
sudo snap install tree # version 1.8.0+pkg-3fd6, or
sudo apt install tree # version 2.0.2-1
See 'snap info tree' for additional versions.
administrator@administrator-virtual-machine:~/src$ tree gnubik-2.4.3
Command 'tree' not found, but can be installed with:
sudo snap install tree # version 1.8.0+pkg-3fd6, or
sudo apt install tree # version 2.0.2-1
See 'snap info tree' for additional versions.
administrator@administrator-virtual-machine:~/src$ sudo apt install tree
[sudo] password for administrator:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  tree
0 upgraded, 1 newly installed, 0 to remove and 393 not upgraded.
Need to get 47.9 kB of archives.
After this operation, 116 kB of additional disk space will be used.
Get:1 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 tree amd64 2.0.2-1 [47.9 kB]
Fetched 47.9 kB in 1s (82.4 kB/s)
Selecting previously unselected package tree.
(Reading database ... 203140 files and directories currently installed.)
Preparing to unpack .../tree_2.0.2-1_amd64.deb ...
Unpacking tree (2.0.2-1) ...
Setting up tree (2.0.2-1) ...
Processing triggers for man-db (2.10.2-1) ...
administrator@administrator-virtual-machine:~/src$
```

```
administrator@administrator-virtual-machine:~/src$ tree gnubik-2.4.3
gnubik-2.4.3
├── ABOUT-NLS
├── aclocal.m4
├── AUTHORS
└── build-aux
    ├── compile
    ├── config.guess
    ├── config.rpath
    ├── config.sub
    ├── depcomp
    ├── install-sh
    ├── missing
    └── texinfo.tex
    ChangeLog
    config.h.in
    configure
    configure.ac
    COPYING
    doc
    ├── automake.mk
    ├── gnubik.6
    ├── gnubik.info
    ├── gnubik-rubric
    └── gnubik.texinfo
    icons
    ├── automake.mk
    ├── gen-dot-desktop.scm
    ├── logo16.png
    ├── logo22.png
    ├── logo22.xcf
    ├── logo32.png
    ├── logo32.xcf
    ├── logo48.png
    └── logo48.xcf
    INSTALL
    Makefile.am
    Makefile.in
    NEWS
    po
    ├── ar.po
    └── automake.mk
```

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```
administrator@administrator-virtual-machine:~/src$ cd src
bash: cd: src: No such file or directory
administrator@administrator-virtual-machine:~/src$ ls
gnubik-2.4.3  gnubik-2.4.3.tar.gz
administrator@administrator-virtual-machine:~/src$ cd ^
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ cd src
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ ls *.c
colour-dialog.c  cube.c  cursors.c  drwBlock.c  glare-common.c  main.c  move.c  select.c  textures.c  version.c
control.c  cubeview.c  dialogs.c  game.c  guile-hooks.c  menus.c  quaternion.c  swatch.c  txfm.c
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ ls *.h
colour-dialog.h  cube.h  cubeview.h  dialogs.h  game.h  guile-hooks.h  move.h  select.h  textures.h  version.h
control.h  cube_i.h  cursors.h  drwBlock.h  glareah.h  menus.h  quaternion.h  swatch.h  txfm.h
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ make --version
GNU Make 4.3
Built for x86_64-pc-linux-gnu
Copyright (C) 1988-2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$


administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ ./configure
bash: ./configure: No such file or directory
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ ls
automake.mk  control.c  cube.h  cubeview.h  dialogs.c  drwBlock.h  glare-common.c  guile-hooks.h  menus.h  quaternion.c  select.h  textures.c  txfm.h
colour-dialog.c  control.h  cube_i.h  cursors.c  dialogs.h  game.c  glareah.h  main.c  move.c  quaternion.h  swatch.c  textures.h  version.c
colour-dialog.h  cube.c  cubeview.c  cursors.h  drwBlock.c  game.h  guile-hooks.c  menus.c  move.h  select.c  swatch.h  txfm.c  version.h
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3/src$ cd ..
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ ls
ABOUT-NLS  AUTHORS  ChangeLog  configure  COPYING  icons  Makefile.am  NEWS  README  src  TODO
aclocal.m4  build-aux  config.h.in  configure.ac  doc  INSTALL  Makefile.in  po  scripts  THANKS
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ ./configure
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
checking for gawk... no
checking for mawk
checking whether sets $(MAKE)... yes
checking whether make supports nested variables... yes
checking for style of include used by make... GNU
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking whether gcc understands -c and -o together... yes
checking dependency style of gcc... gcc3
checking how to run the C preprocessor... gcc -E
checking for grep that handles long lines and -e... /usr/bin/grep
checking for egrep... /usr/bin/grep -E
checking for ANSI C header files... yes
checking for sys/types.h... yes
checking for sys/stat.h... yes
checking for stdlib.h... yes
checking for stdlib.h... yes
```

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```
configure: error: No de directory seems to be installed
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ make
make: *** No targets specified and no makefile found. Stop.
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ sudo make install
[sudo] password for administrator:
make: *** No rule to make target 'install'. Stop.
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ which gnubik
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ gnubik --version
Command 'gnubik' not found, but can be installed with:
sudo apt install gnubik
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ sudo apt install gnubik
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
libgtkglext1
The following NEW packages will be installed:
gnubik libgtkglext1
0 upgraded, 2 newly installed, 0 to remove and 393 not upgraded.
Need to get 175 kB of archives.
After this operation, 838 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libgtkglext1 amd64 1.2.0-11 [73.9 kB]
Get:2 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 gnubik amd64 2.4.3-3build1 [101 kB]
Fetched 175 kB in 1s (227 kB/s)
Selecting previously unselected package libgtkglext1:amd64.
(Reading database ... 203148 files and directories currently installed.)
Preparing to unpack .../libgtkglext1_1.2.0-11_amd64.deb ...
Unpacking libgtkglext1:amd64 (1.2.0-11) ...
Selecting previously unselected package gnubik.
Preparing to unpack .../gnubik_2.4.3-3build1_amd64.deb ...
Unpacking gnubik (2.4.3-3build1) ...
Setting up libgtkglext1:amd64 (1.2.0-11) ...
Setting up gnubik (2.4.3-3build1) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for install-info (6.8-4build1) ...
```

```
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ which gnubik
/usr/games/gnubik
administrator@administrator-virtual-machine:~/src/gnubik-2.4.3$ gnubik --version
Gtk-Message: 16:57:44.228: Failed to load module "canberra-gtk-module"
2.4.3
  This program is free software; you can redistribute it and/or modify
  it under the terms of the GNU General Public License as published by
  the Free Software Foundation; either version 3 of the License, or
  (at your option) any later version.

  This program is distributed in the hope that it will be useful,
  but WITHOUT ANY WARRANTY; without even the implied warranty of
  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
  GNU General Public License for more details.

  You should have received a copy of the GNU General Public License
  along with this program. If not, see <http://www.gnu.org/licenses/>.
```

```
administrator@administrator-virtual-machine:~$ less /etc/apt/sources.list
```

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```
#deb cdrom:[Ubuntu 22.04.2 LTS _Jammy Jellyfish_ - Release amd64 (20230223)]/ jammy main restricted
# See http://help.ubuntu.com/community/UpgradeNotes for how to upgrade to
# newer versions of the distribution.
deb http://pk.archive.ubuntu.com/ubuntu/ jammy main restricted
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy main restricted

## Major bug fix updates produced after the final release of the
## distribution.
deb http://pk.archive.ubuntu.com/ubuntu/ jammy-updates main restricted
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy-updates main restricted

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team. Also, please note that software in universe WILL NOT receive any
## review or updates from the Ubuntu security team.
deb http://pk.archive.ubuntu.com/ubuntu/ jammy universe
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy universe
deb http://pk.archive.ubuntu.com/ubuntu/ jammy-updates universe
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy-updates universe

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team, and may not be under a free licence. Please satisfy yourself as to
## your rights to use the software. Also, please note that software in
## multiverse WILL NOT receive any review or updates from the Ubuntu
## security team.
deb http://pk.archive.ubuntu.com/ubuntu/ jammy multiverse
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy multiverse
deb http://pk.archive.ubuntu.com/ubuntu/ jammy-updates multiverse
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy-updates multiverse

## N.B. software from this repository may not have been tested as
## extensively as that contained in the main release, although it includes
## newer versions of some applications which may provide useful features.
## Also, please note that software in backports WILL NOT receive any review
## or updates from the Ubuntu security team.
deb http://pk.archive.ubuntu.com/ubuntu/ jammy-backports main restricted universe multiverse
# deb-src http://pk.archive.ubuntu.com/ubuntu/ jammy-backports main restricted universe multiverse

deb http://security.ubuntu.com/ubuntu jammy-security main restricted
# deb-src http://security.ubuntu.com/ubuntu jammy-security main restricted
deb http://security.ubuntu.com/ubuntu jammy-security universe
# deb-src http://security.ubuntu.com/ubuntu jammy-security universe
deb http://security.ubuntu.com/ubuntu jammy-security multiverse
# deb-src http://security.ubuntu.com/ubuntu jammy-security multiverse

/etc/apt/sources.list
```

```
administrator@administrator-virtual-machine:~$ sudo apt install fritzning
[sudo] password for administrator:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
fritzning-data fritzning-parts libdouble-conversion libgit2-1.1 libhttp-parser2.9 libmbcrypto7 libmbdts14 libmbdex509-1 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5
libqt5guis libqt5networks libqt5printsupport5 libqt5serialport5 libqt5sql5 libqt5sql5-sqlite libqt5svg5 libqt5widets5 libqt5xml5 libssh2-1 libxcb-xinerama0 libxcb-xinput0
qt5-gtk-platformtheme qttranslations5-l10n
Suggested packages:
qt5-image-formats-plugins qtwayland5
The following NEW packages will be installed:
fritzning fritzning-data fritzning-parts libdouble-conversion3 libgit2-1.1.libhttp-parser2.9.libmbcrypto7.libmbdts14.libmbdex509-1.libmd4c0.libpcre2-16-0.libqt5core5a
libqt5dbus5.libqt5guis.libqt5networks5.libqt5printsupport5.libqt5serialport5.libqt5sql5.libqt5sql5-sqlite.libqt5svg5.libqt5widets5.libqt5xml5.libssh2-1.libxcb-xinerama0
libxcb-xinput0.qt5-gtk-platformtheme.qttranslations5-l10n
0 upgraded, 27 newly installed, 0 to remove and 393 not upgraded.
Need to get 34.6 MB of archives.
After this operation, 243 MB of additional disk space will be used.
Do you want to continue? [Y/n]
Get: 1 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libdouble-conversion3 amd64 3.1.7-4 [39.0 kB]
Get: 2 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 libgit2-1.1.and64 1.1.0+dfsg.1-4.ubuntu0.1 [457 kB]
Get: 3 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpcre2-16-0 amd64 10.39-3ubuntu0.1 [203 kB]
Get: 4 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5core5a amd64 5.15.3+dfsg-2ubuntu0.2 [2,006 kB]
Get: 5 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libd4c0 amd64 0.4.8-1 [42.0 kB]
Get: 6 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5dbus5 amd64 5.15.3+dfsg-2ubuntu0.2 [222 kB]
Get: 7 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5networks amd64 5.15.3+dfsg-2ubuntu0.2 [731 kB]
Get: 8 http://pk.archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-xinerama0 amd64 1.14-3ubuntu3 [5,414 kB]
Get: 9 http://pk.archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-xinput0 amd64 1.14-3ubuntu3 [34.3 kB]
Get: 10 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5guis amd64 5.15.3+dfsg-2ubuntu0.2 [3,722 kB]
Get: 11 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5widets5 amd64 5.15.3+dfsg-2ubuntu0.2 [2,561 kB]
Get: 12 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libqt5svg5 amd64 5.15.3-1 [149 kB]
Ign: 12 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libqt5svg5 amd64 5.15.3-1
Get: 13 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libhttp-parser2.9.and64 2.9.4-1 [21.5 kB]
Get: 14 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libmbcrypto7 amd64 2.28.0-1ubuntu1 [204 kB]
Get: 15 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libmbdex509-1.and64 2.28.0-1ubuntu1 [47.2 kB]
Get: 16 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libmbdts14 amd64 2.28.0-1ubuntu1 [82.7 kB]
Get: 17 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libssh2-1.and64 1.10.6-1ubuntu9 [89 kB]
Get: 18 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5printsupport5 amd64 5.15.3+dfsg-2ubuntu0.2 [214 kB]
Get: 19 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libqt5serialport5 amd64 5.15.3-1 [34.6 kB]
Get: 20 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5sql5 amd64 5.15.3+dfsg-2ubuntu0.2 [123 kB]
Get: 21 http://pk.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 libqt5xml5 amd64 5.15.3+dfsg-2ubuntu0.2 [124 kB]
Get: 22 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 fritzning-data all 0.9.6+dfsg-1 [3,406 kB]
40% [22 fritzning-data 123 kB/3,406 kB 4%] 183 kB/s 2min 8s
```

```
administrator@administrator-virtual-machine:~$ sudo zypper remove fritzning
sudo: zypper: command not found
administrator@administrator-virtual-machine:~$ apt install fritzning
E: Could not open lock file /var/lib/dpkg/lock-frontend - open (13: Permission denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontend), are you root?
administrator@administrator-virtual-machine:~$ zypper remove fritzning
Command 'zypper' not found, but can be installed with:
sudo apt install zypper
administrator@administrator-virtual-machine:~$ sudo apt install zypper
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
augeas-lenses debugedit libaugeas0 libfsverity0 librpm9 librpmbuild9 librpmio9 librpmsign9 libsolv-tools libsolv1 libsolvext1 libyaml-cpp0.7 libzypp-bin libzypp-common
libzypp-config libzypp1722 rpm rpm-common rpm2cpio zypper-common
Suggested packages:
augeas-doc augeas-tools libzypp-doc alien eutils rpmlint rpm-i18n zypper-doc
The following NEW packages will be installed:
augeas-lenses debugedit libaugeas0 libfsverity0 librpm9 librpmbuild9 librpmio9 librpmsign9 libsolv-tools libsolv1 libsolvext1 libyaml-cpp0.7 libzypp-bin libzypp-common
libzypp-config libzypp1722 rpm rpm-common rpm2cpio zypper-common
0 upgraded, 21 newly installed, 0 to remove and 393 not upgraded.
Need to get 5,234 kB of archives.
After this operation, 21.7 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get: 1 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 augeas-lenses all 1.13.0-1 [321 kB]
Get: 2 http://pk.archive.ubuntu.com/ubuntu jammy/main amd64 debugedit amd64 1:5.0-4build1 [47.2 kB]
Get: 3 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libaugeas0 amd64 1.13.0-1 [200 kB]
Get: 4 http://pk.archive.ubuntu.com/ubuntu jammy/universe amd64 libfsverity0 amd64 1.4-1-exp1build1 [10.4 kB]
```

Breeha Qasim 08283

```
administrator@administrator-virtual-machine:~$ mkdir lab3
administrator@administrator-virtual-machine:~$ cd lab3
administrator@administrator-virtual-machine:~/lab3$ zypper remove fritz
Root privileges are required to run this command.
administrator@administrator-virtual-machine:~/lab3$ sudo apt install zypper
[sudo] password for administrator:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
zypper is already the newest version (1.14.42-2).
0 upgraded, 0 newly installed, 0 to remove and 393 not upgraded.
administrator@administrator-virtual-machine:~/lab3$ zypper remove fritz
Root privileges are required to run this command.
administrator@administrator-virtual-machine:~/lab3$ sudo zypper remove fritz
Reading installed packages...
'fritz' not found in package names. Trying capabilities.
No provider of 'fritz' found.
Resolving package dependencies...

Problem: This request will break your system!
  nothing provides requested glibc
Have you enabled all requested repositories?
  Solution 1: ignore the warning of a broken system (requires:glibc)

Choose the above solution using '1' or cancel using 'c' [1/c/d/?] (c): ^Cadministrator@administrator-virtual-machine:~/lab3$
```

```
administrator@administrator-virtual-machine:~/lab3$ dnf autoremove fritz
Command 'dnf' not found, but can be installed with:
sudo apt install dnf
administrator@administrator-virtual-machine:~/lab3$ sudo apt install dnf
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  deltarpm dnf-data libcomps libdnf2-common libmodulemd2 librepo0 libsdl2 python3-dnf python3-distutils python3-dnf python3-gpg python3-hawkey python3-libcomps
  python3-libdnf python3-rpm python3-unbound sqlite3
Suggested packages:
  python3-dnf-docs python3-hawkey-docs python3-libcomps-doc sqlite3-doc
The following NEW packages will be installed:
  deltarpm dnf dnf-data libcomps libdnf2-common libmodulemd2 librepo0 libunbound8 python3-distutils python3-dnf python3-gpg python3-hawkey python3-libcomps python3-libdnf
  python3-rpm python3-unbound sqlite3
The following packages will be upgraded:
  libsqlite3-0
1 upgraded, 18 newly installed, 0 to remove and 392 not upgraded.
Need to get 214 kB/4,630 kB of archives.
After this operation, 1.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Err:1 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-gpg amd64 1.16.0-1.2ubuntu4.1
  404 Not Found [IP: 103.151.111.245 80]
E: Failed to fetch http://pk.archive.ubuntu.com/ubuntu/pool/main/g/gpgme1.0/python3-gpg_1.16.0-1.2ubuntu4.1_amd64.deb  404 Not Found [IP: 103.151.111.245 80]
E: Unable to fetch some archives, maybe run apt-get update or try with --fix-missing?
administrator@administrator-virtual-machine:~/lab3$ dnf autoremove fritz
Command 'dnf' not found, but can be installed with:
sudo apt install dnf
administrator@administrator-virtual-machine:~/lab3$
```

```
administrator@administrator-virtual-machine:~/lab3$ sudo apt install ./atom-amd64.deb
Reading package lists... Done
E: Unsupported file ./atom-amd64.deb given on commandline
administrator@administrator-virtual-machine:~/lab3$ wget https://kojipkgs.fedoraproject.org/packages/nano/4.3/3.fc31/x86_64/nano-4.3-3.fc31.x86_64.rpm
--2024-09-03 17:31:56 - https://kojipkgs.fedoraproject.org/packages/
Resolving kojipkgs.fedoraproject.org (kojipkgs.fedoraproject.org)... 38.145.60.20, 38.145.60.21
Connecting to kojipkgs.fedoraproject.org (kojipkgs.fedoraproject.org)[38.145.60.20]:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://kojipkgs.fedoraproject.org/packages/index.html; [following]
--2024-09-03 17:31:56 - https://Kojipkgs.fedoraproject.org/packages/index.html/
Reusing existing connection to kojipkgs.fedoraproject.org:443.
HTTP request sent, awaiting response... 200 OK
Length: 523 [text/html]
Saving to: 'index.html'

index.html          100%[=====] 523 ---KB/s   in 0s

2024-09-03 17:31:57 (117 MB/s) - 'index.html' saved [523/523]

bash: nano/4.3/3.fc31/x86_64/nano-4.3-3.fc31.x86_64.rpm: No such file or directory
administrator@administrator-virtual-machine:~/lab3$ sudo dnf install nano-4.3-3.fc31.x86_64.rpm
sudo: dnf: command not found
administrator@administrator-virtual-machine:~/lab3$ wget https://download.opensuse.org/repositories/openSUSE/
Leap:/15.1/standard/x86_64/nano-2.9.6-lp151.2.3.x86_64.rpm
--2024-09-03 17:36:26 - https://download.opensuse.org/repositories/openSUSE/
Resolving download.opensuse.org (download.opensuse.org)... 195.135.223.226, 2a07:de40:b250:131:10:151:131:30
Connecting to download.opensuse.org (download.opensuse.org)|195.135.223.226|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 10240 (10K) [text/html]
Saving to: 'index.html.1'

index.html.1         100%[=====] 10.00K ---KB/s   in 0s

2024-09-03 17:36:27 (32.1 MB/s) - 'index.html.1' saved [10240/10240]

bash: Leap:/15.1/standard/x86_64/nano-2.9.6-lp151.2.3.x86_64.rpm: No such file or directory
administrator@administrator-virtual-machine:~/lab3$ sudo zypper install nano-2.9.6-lp151.2.3.x86_64.rpm
Specified local path does not exist or is not accessible.
Problem retrieving the specified RPM file:
Malformed URI:
Please check whether the file is accessible.
Problem with the RPM file specified as 'nano-2.9.6-lp151.2.3.x86_64.rpm', skipping.
No valid arguments specified.
administrator@administrator-virtual-machine:~/lab3$
```

Breeha Qasim 08283

```
administrator@administrator-virtual-machine:~/lab3$ sudo add-apt-repository ppa:webupd8team/atom
Repository: 'deb https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu/ jammy main'
Description:
Please use the official repository instead: https://flight-manual.atom.io/getting-started/sections/installing-atom/#platform-linux

PPA for Atom text editor: https://atom.io

Now available for both 32bit and 64bit!

More info, report packaging bugs, feedback, etc.: http://www.webupd8.org/2014/05/install-atom-text-editor-in-ubuntu-via-ppa.html

Report non-packaging Atom bugs here: https://github.com/atom/atom/issues
More info: https://launchpad.net/~webupd8team/+archive/ubuntu/atom
Adding repository.
Press [ENTER] to continue or Ctrl-c to cancel.
Adding deb entry to /etc/apt/sources.list.d/webupd8team-ubuntu-atom-jammy.list
Adding disabled deb-src entry to /etc/apt/sources.list.d/webupd8team-ubuntu-atom-jammy.list
Adding key to /etc/apt/trusted.gpg.d/webupd8team-ubuntu-atom.gpg with fingerprint 746CC6D870DSC8D49A3548602DA059A59555E55
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Ign:4 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy InRelease
Get:5 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Err:6 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy Release
  404 Not Found [IP: 185.125.199.80 443]
Get:7 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,988 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1,760 kB]
Get:9 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [590 kB]
Get:10 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [349 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [531 kB]
Get:12 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [103 kB]
Get:13 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 48x48 Icons [37.5 kB]
Get:14 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 64x64 Icons [56.8 kB]
Get:15 http://pk.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [17.8 kB]
Get:16 http://pk.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2,384 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [291 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [899 kB]
Get:19 http://security.ubuntu.com/ubuntu jammy-security/universe i386 Packages [626 kB]
Get:20 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [175 kB]
Get:21 http://pk.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [19.2 kB]
Get:22 http://pk.archive.ubuntu.com/ubuntu jammy-updates/restricted i386 Packages [38.9 kB]
Get:23 http://pk.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [410 kB]

administrator@administrator-virtual-machine:~/lab3$ sudo apt update
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:4 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Ign:5 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy InRelease
Err:6 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy Release
  404 Not Found [IP: 185.125.199.80 443]
Reading package lists... Done
E: The repository 'https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
administrator@administrator-virtual-machine:~/lab3$ sudo apt install atom
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package atom
administrator@administrator-virtual-machine:~/lab3$ zypper addrepo https://download.opensuse.org/repositories/Education/openSUSE_Leap_15.2/Education.repo
Root privileges are required to run this command.
bash: Education/openSUSE_Leap_15.2/Education.repo: No such file or directory
administrator@administrator-virtual-machine:~/lab3$ sudo zypper addrepo https://download.opensuse.org/repositories/Education/openSUSE_Leap_15.2/Education.repo
If only one argument is used, it must be a URI pointing to a .repo file.
addrepo (ar) [OPTIONS] <URI> <ALIAS>
addrepo (ar) [OPTIONS] <FILE.repo>

Add a repository to the system. The repository can be specified by its URI or can be read from specified .repo file (even remote).

  Command options:
    -r, --repo <FILE.repo>      Just another means to specify a .repo file to read.
    -c, --check                  Probe URI.
    -C, --no-check               Don't probe URI, probe later during refresh.
    -p, --priority <PRIORITY>   Set priority of the repository. Default: 0
    -k, --keep-packages           Enable RPM files caching. Default: false
    -K, --no-keep-packages        Disable RPM files caching.
    -g, --gpgcheck                Enable GPG check for this repository.
    --gpgcheck-strict            Enable strict GPG check for this repository.
    --gpgcheck-allow-unsigned    Short hand for '--gpgcheck-allow-unsigned-repo
                                --gpgcheck-allow-unsigned-package'.
    --gpgcheck-allow-signed-repo
                                --gpgcheck-allow-signed-package.

administrator@administrator-virtual-machine:~/lab3$ sudo zypper in obs-studio
Loading repository data...
Warning: No repositories defined. Operating only with the installed resolvables. Nothing can be installed.
Reading installed packages...
'obs-studio' not found in package names. Trying capabilities.
No provider of 'obs-studio' found.
Resolving package dependencies...

Problem: This request will break your system!
  nothing provides requested glibc
Have you enabled all requested repositories?
  Solution 1: ignore the warning of a broken system (requires:glibc)

Choose the above solution using '1' or cancel using 'c' [1/c/d/?] (c): ^Cadministrator@administrator-virtual-machine:~/lab3$
```

Breeha Qasim 08283

```
administrator@administrator-virtual-machine:~/lab3$ nano sublime.sh
administrator@administrator-virtual-machine:~/lab3$ bash sublime.sh
sudo: apt-key: command not found
deb https://download.sublimetext.com/ apt/stable/
sublime.sh: line 3: pt/sources.list.d/sublime-text.list: No such file or directory
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:4 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Ign:5 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy InRelease
Err:6 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy Release
  404  Not Found [IP: 185.125.190.80 443]
Reading package lists... Done
E: The repository 'https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu jammy' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
No apt package "sublime-text", but there is a snap with that name.
Try "snap install sublime-text"

E: Unable to locate package sublime-text
E: Unable to locate package -y
rm: cannot remove 'sublimehq-pub.gpg': No such file or directory
administrator@administrator-virtual-machine:~/lab3$ snap install sublime-text
error: This revision of snap "sublime-text" was published using classic confinement and thus may
perform arbitrary system changes outside of the security sandbox that snaps are usually
confined to, which may put your system at risk.

If you understand and want to proceed repeat the command including --classic.
administrator@administrator-virtual-machine:~/lab3$ sudo snap install sublime-text --classic
sublime-text 4180 from Snapcrafters Installed
```

```
administrator@administrator-virtual-machine:~/lab3$ nano eric.sh
administrator@administrator-virtual-machine:~/lab3$ 
administrator@administrator-virtual-machine:~/lab3$ whoami
administrator
administrator@administrator-virtual-machine:~/lab3$ nano eric.sh
administrator@administrator-virtual-machine:~/lab3$ bash eric.sh
Defaulting to user installation because normal site-packages is not writeable
ERROR: Invalid requirement: '-administrator'
administrator@administrator-virtual-machine:~/lab3$ nano eric.sh
administrator@administrator-virtual-machine:~/lab3$ bash eric.sh

Usage:
 /usr/bin/python3 -m pip install [options] <requirement specifier> [package-index-options] ...
 /usr/bin/python3 -m pip install [options] -r <requirements file> [package-index-options] ...
 /usr/bin/python3 -m pip install [options] [-e] <vcs project url> ...
 /usr/bin/python3 -m pip install [options] [-e] <local project path> ...
 /usr/bin/python3 -m pip install [options] <archive url/path> ...

no such option: -s
```

```
administrator@administrator-virtual-machine:~/lab3$ snap install pycharm-community --classic
Download snap "pycharm-community" (408) from channel "stable"                                84% 1.12MB/s 1m44s
administrator@administrator-virtual-machine: $ wget http://ftp.jaist.ac.jp/pub/eclipse/technology/epp/downloads/release/2019-12/R/eclipse-java-2019-12-R-linux-gtk-x86_64.tar.gz
#Install
tar -xf eclipse-java-2019-12-R-linux-gtk-x86_64.tar.gz --directory /opt/
#Softlink
sudo ln -s /opt/eclipse/eclipse /usr/local/bin/eclipse-jav
--2024-09-04 12:09:19-- http://ftp.jaist.ac.jp/pub/eclipse/technology/epp/downloads/release/2019-12/R/eclipse-java-2019-12-R-linux-gtk-x86_64.tar.gz
Resolving ftp.jaist.ac.jp (ftp.jaist.ac.jp)... 150.65.7.130, 2001:df0:2ed:feed::feed
Connecting to ftp.jaist.ac.jp (ftp.jaist.ac.jp)|150.65.7.130|:80... connected.
HTTP request sent, awaiting response... 404 Not Found
2024-09-04 12:09:19 ERROR 404: Not Found.

bash: 019-12/R/eclipse-java-2019-12-R-linux-gtk-x86_64.tar.gz: No such file or directory
tar: eclipse-java-2019-12-R-linux-gtk-x86_64.tar.gz: Cannot open: No such file or directory
tar: Error is not recoverable: exiting now
```

```
administrator@administrator-virtual-machine: $ wget https://netix.dl.sourceforge.net/project/drjava/1.%20DrJava%20Stable%20Releases/drjava-beta-20190813-220051/drjava-beta-20190813-220051.jar
#Install
mkdir /opt/DrJava
mv drjava-beta-20190813-220051.jar /opt/DrJava
#Softlink
echo "java -jar drjava-beta-20190813-220051.jar" >> /opt/DrJava/DrJava
chmod +x /opt/DrJava/DrJava
sudo ln -s /opt/DrJava/DrJava /usr/local/bin/DrJava
--2024-09-04 12:06:25-- https://netix.dl.sourceforge.net/project/drjava/1.%20DrJava%20Stable%20Releases/drjava-beta-20190813-220051/drjava-beta-20190813-220051.jar
Resolving netix.dl.sourceforge.net (netix.dl.sourceforge.net)... 87.121.121.2
Connecting to netix.dl.sourceforge.net (netix.dl.sourceforge.net)|87.121.121.2|:443... failed: Connection refused.
bash: fg: %20Releases/drjava-beta-20190813-220051/drjava-beta-20190813-220051.jar: no such job
mkdir: cannot create directory '/opt/DrJava': Permission denied
mv: cannot stat 'drjava-beta-20190813-220051.jar': No such file or directory
bash: /opt/DrJava/DrJava: No such file or directory
chmod: cannot access '/opt/DrJava/DrJava': No such file or directory
[sudo] password for administrator:
```

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```
administrator@administrator-virtual-machine: ~$ wget http://mirrors-wan.geekpie.club/qtproject/archive/qt/5.14/5.14.0/qtopensource-linu
nux-x64-5.14.0.run
#Install
./qt-opensource-linux-x64-5.14.0.run
--2024-09-04 12:10:20--  http://mirrors-wan.geekpie.club/qtproject/archive/qt/5.14/5.14.0/qtopensource-linux-x64-5.14.0.run
Resolving mirrors-wan.geekpie.club (mirrors-wan.geekpie.club)... failed: Name or service not known.
wget: unable to resolve host address 'mirrors-wan.geekpie.club'
bash: ./qt-opensource-linux-x64-5.14.0.run: No such file or directory

administrator@administrator-virtual-machine: ~$ wget https://repo.anaconda.com/archive/Anaconda3-2019.10-Linux-x86_64.sh
bash Anaconda3-2019.03-Linux-x86_64.sh -b
--2024-09-04 12:12:29--  https://repo.anaconda.com/archive/Anaconda3-2019.10-Linux-x86_64.sh
Resolving repo.anaconda.com (repo.anaconda.com)... 104.16.32.241, 104.16.191.158, 2606:4700::6810:20f1, ...
Connecting to repo.anaconda.com (repo.anaconda.com)|104.16.32.241|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 530308481 (500M) [application/x-sh]
Saving to: 'Anaconda3-2019.10-Linux-x86_64.sh'

Anaconda3-2019.10-Linux-x86_64.sh 100%[=====] 505.74M 911KB/s in 7
m 43s
2024-09-04 12:20:13 (1.09 MB/s) - 'Anaconda3-2019.10-Linux-x86_64.sh' saved [530308481/530308481]

bash: Anaconda3-2019.03-Linux-x86_64.sh: No such file or directory
```

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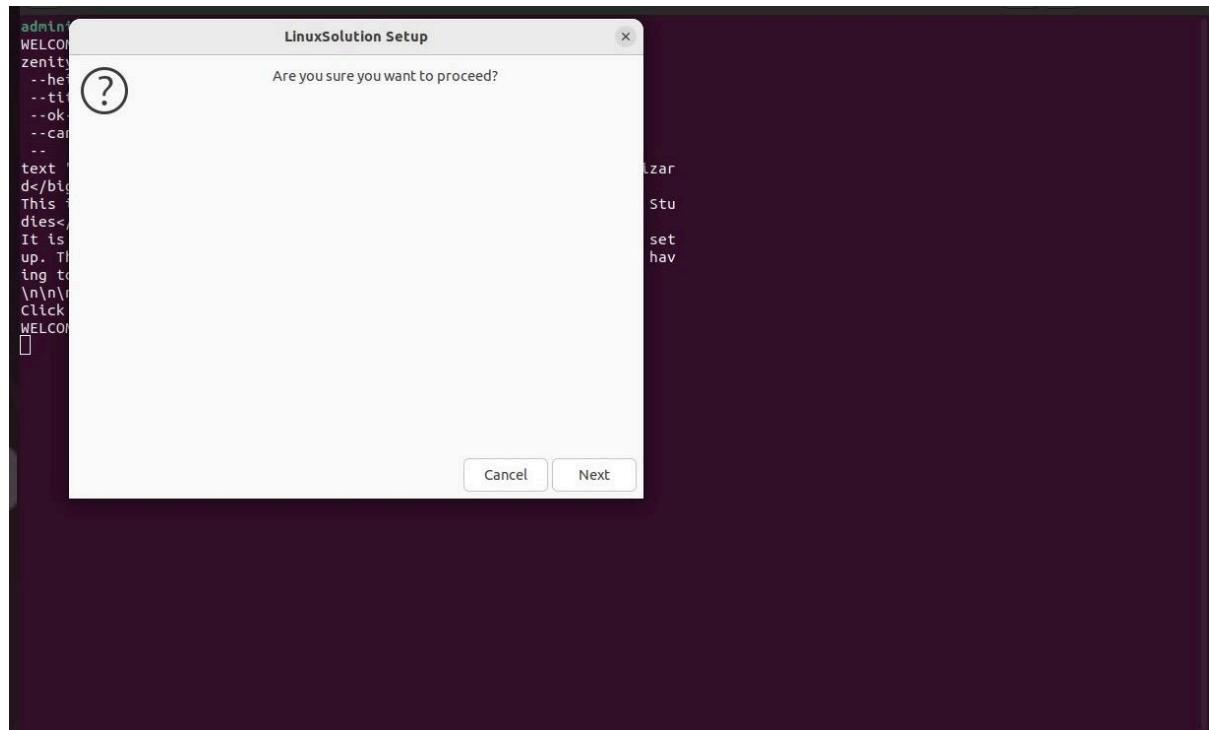
```
tar: F... Superuser Password now
admin@...:~# Type your password
nux-xo...:~# #!/bin/bash
#Insta...:~# ./qt-d...
--2024-09-04 12:12:29+ http://repo.anaconda.com/archive/Anaconda3-2019.10-Linux-x86_64.sh
Resolving repo.anaconda.com (repo.anaconda.com)... 104.16.32.241, 104.16.191.158, 2606:4700::6810:20f1, ...
Connecting to repo.anaconda.com (repo.anaconda.com)|104.16.32.241|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 530308481 (506M) [application/x-sh]
Saving to: 'Anaconda3-2019.10-Linux-x86_64.sh'

Anaconda3-2019.10-Linux-x86_64.sh 100%[=====] 505.74M 911KB/s in 7m 43s

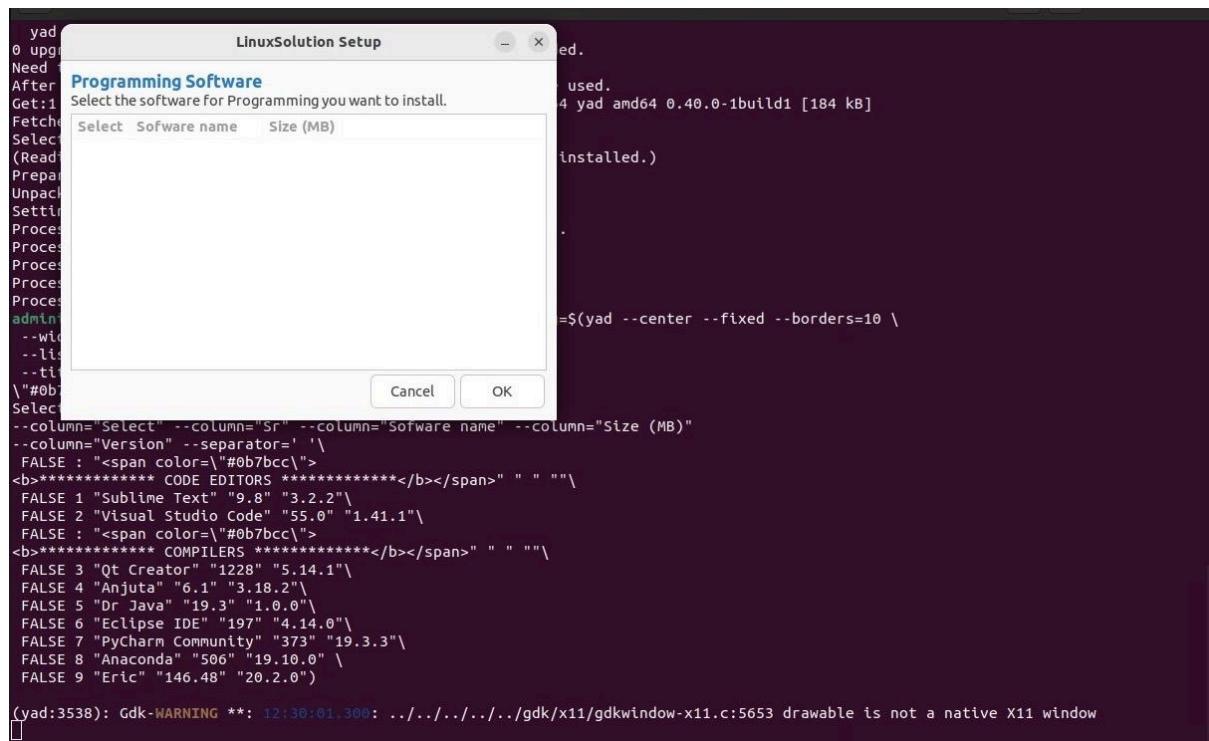
2024-09-04 12:20:13 (1.09 MB/s) - 'Anaconda3-2019.10-Linux-x86_64.sh' saved [530308481/530308481]

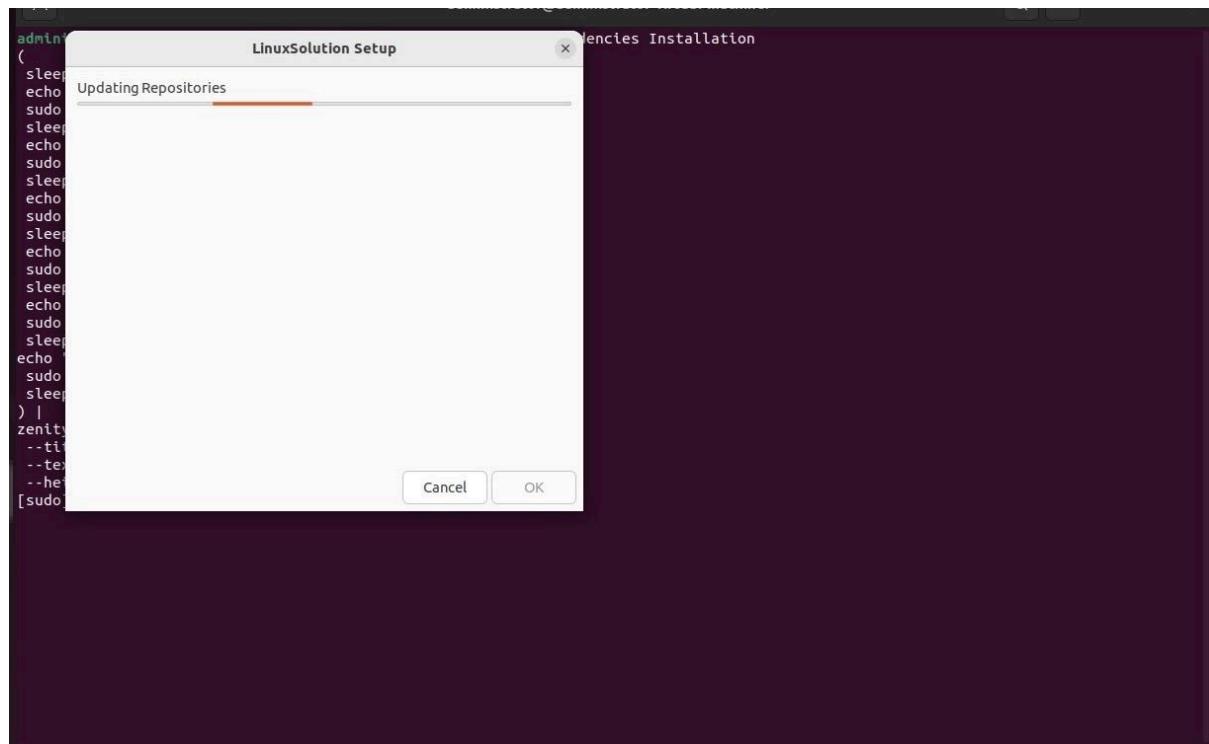
bash: Anaconda3-2019.03-Linux-x86_64.sh: No such file or directory
administrator@administrator-virtual-machine: $ # DIALOG - Get sudo Password
password=$(zenity --password --title="Superuser Password")
if sudo -S > /dev/null << EOF
$password
EOF
then
echo 'Correct password.'
else
zenity --error \
--width=500 \
--text "Incorrect Password. Please run LinuxSolution
with Administrative Privileges." \
--title="LinuxSolution Setup"
exit 1
fi
LinuxSolution Setup

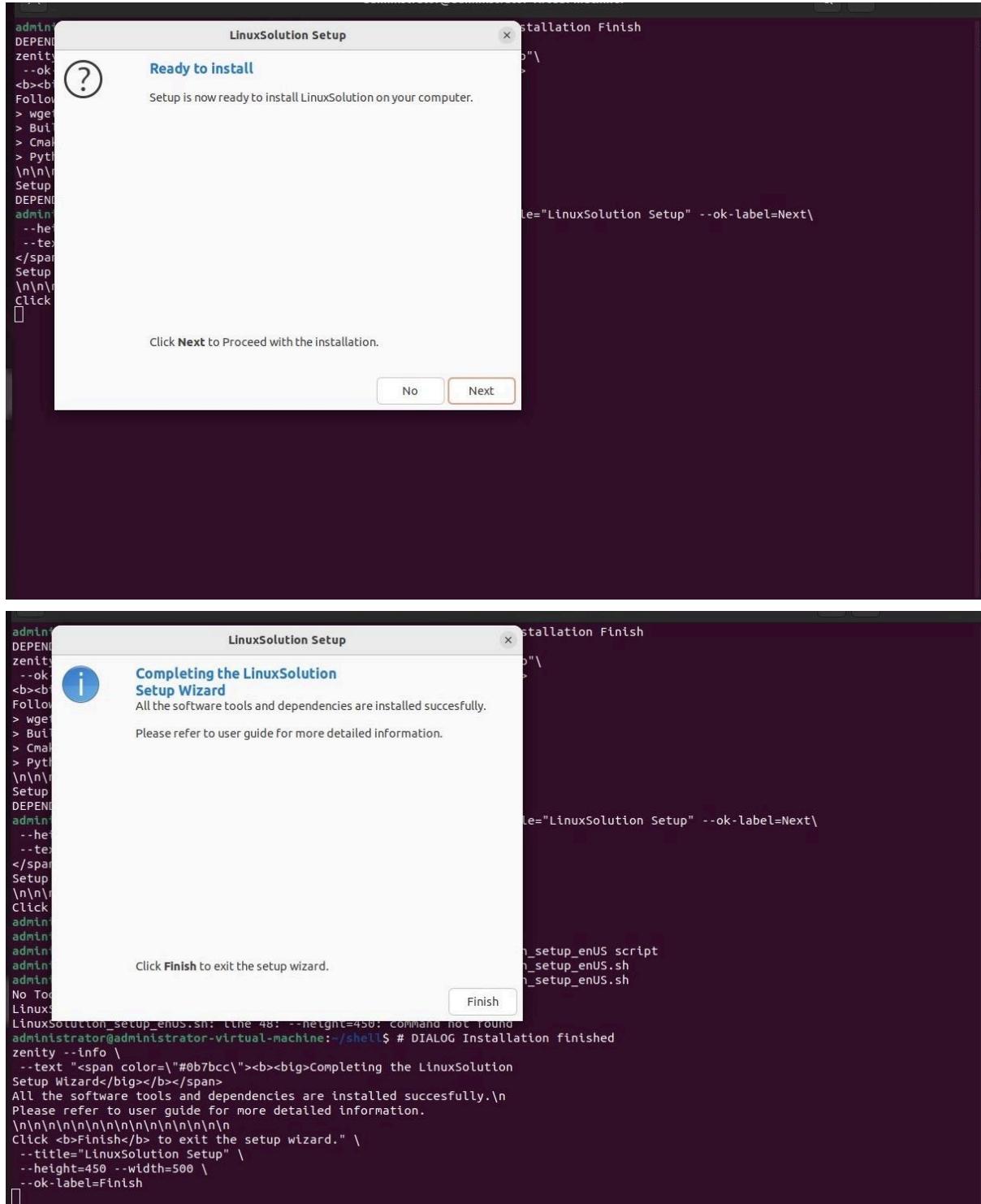
2024-09-04 12:20:13 [530308481/530308481] LinuxSolution Setup x
No internet connection available. administrator@administrator-virtual-machine: $ # DIALOG - Internet Availability
password
if sudo -S > /dev/null && echo 1 || echo 0;
then
echo "Internet Available";
zenity --info \
--width=500 --timeout=1
--text "Internet connection check successful.\nDependencies installation will now proceed." \
--title="LinuxSolution Setup"
else
echo "No internet";
zenity --error \
--width=500 --timeout=5
--text "No internet connection available.\nPlease check your internet connection and restart the installation." \
--title="LinuxSolution Setup"
exit 1
fi
No internet
```



```
administrator@administor-virtual-machine:~$ goto() {  
label=$1  
cmd=$(sed -n "/$label:{:a;n;p;ba};" $0 | grep -v ':$')  
eval "$cmd"  
exit  
}  
administrator@administor-virtual-machine:~$ case $? in  
0)  
#Next Button  
echo "Installing...";;  
1)  
zenity --question \  
--text "Are you sure you want to exit the installation?" \  
--ok-label=Yes \  
--window-icon="media/icon.png" \  
--width=500 \  
--title="LinuxSolution Setup" \  
--cancel-label=No;  
case $? in  
0) echo "Installation Cancelled";  
exit ;;  
1) echo "Installation resumed";  
goto WELCOME;  
-1) echo "An unexpected error has occurred.";;  
esac;;  
-1)  
echo "An unexpected error has occurred.";  
zenity --window-icon="media/icon.png" --error --  
text "Error occurred during installation.";  
exit ;;  
esac  
Installing...
```







Section 3

Q1

```
#!/bin/bash

# Step 1: Reading details about the hard disk
total_size=$(df --output=size -h / | tail -1)
free_space=$(df --output=avail -k / | tail -1)

echo "Total disk size: $total_size"
echo "Available space: $free_space KB"

# Step 2: Taking a sample sentence from the user
echo "Please enter a sample sentence: "
read sentence

# Step 3: Taking a sample name of the file from the user
echo "Please enter the name of the file (e.g., myfile.txt): "
read file_name

# Step 4: Calculating the number of sentence instances to write
sentence_length=$(echo "$sentence" | wc -c)
instance_count=$((($free_space / 100000) / $sentence_length))

echo "Writing $instance_count instances of the sentence to $file_name..."

# Step 5: Creating the file and writing the sentence instances
for i in $(seq 1 $instance_count)
do
    echo "$sentence" >> "$file_name"
done

echo "File '$file_name' created with $instance_count instances of the sentence."
```

```
administrator@administor-virtual-machine:~$ nano create_simple_file.sh
administrator@administor-virtual-machine:~$ bash create_simple_file.sh
Total disk size: 20G
Available space: 5506324 KB
Please enter a sample sentence:
I dont like OS
Please enter the name of the file (e.g., myfile.txt):
create_simple_file.sh
Writing 3 instances of the sentence to create_simple_file.sh...
File 'create_simple_file.sh' created with 3 instances of the sentence.
create_simple_file.sh: line 31: I: command not found
create_simple_file.sh: line 32: I: command not found
create_simple_file.sh: line 33: I: command not found
```

3.2

```
GNU nano 6.2                                         disk.c *
#include <stdio.h>
#include <stdlib.h>
#include <sys/statvfs.h>

int main() {
    struct statvfs disk_info;

    // Get file system statistics
    if (statvfs("/", &disk_info) != 0) {
        perror("statvfs");
        return EXIT_FAILURE;
    }

    // Total size of the disk
    unsigned long long total_size = disk_info.f_blocks * disk_info.f_frsize;

    // Free space available on the disk
    unsigned long long free_space = disk_info.f_bfree * disk_info.f_frsize;

    // Converting to more readable units (e.g., GB)
    double total_size_gb = total_size / (1024.0 * 1024.0 * 1024.0);
    double free_space_gb = free_space / (1024.0 * 1024.0 * 1024.0);

    printf("Total disk size: %.2f GB\n", total_size_gb);
    printf("Free space available: %.2f GB\n", free_space_gb);

    return EXIT_SUCCESS;
}
```

```
administrator@administrator-virtual-machine:~$ nano disk.c
administrator@administrator-virtual-machine:~$ gcc -o disk_info disk.c
administrator@administrator-virtual-machine:~$ ./disk_info
Total disk size: 19.02 GB
Free space available: 6.24 GB
```

3.3

```
GNU nano 6.2                                         read_file.sh *
#!/bin/bash

# Check if a file name was provided as an argument
if [ $# -eq 0 ]; then
    echo "Usage: bash read_file.sh <filename>"
    exit 1
fi

# Assign the first argument to a variable
file_name=$1

# Check if the file exists
if [ ! -f "$file_name" ]; then
    echo "File not found: $file_name"
    exit 1
fi

# Step 1: Find out the total size of the file in bytes
file_size=$(stat --format=%s "$file_name")
echo ""
echo "[1] Total size of '$file_name': $file_size bytes"

# Step 2: Print the number of lines present in the file
line_count=$(wc -l < "$file_name")
echo ""
echo "[2] Number of lines in '$file_name': $line_count"

# Step 3: Print the first line of the file
first_line=$(head -n 1 "$file_name")
echo ""
echo "[3] First line: $first_line"

# Step 4: Print the last line of the file
last_line=$(tail -n 1 "$file_name")
echo ""
echo "[4] Last line: $last_line"
```

```
administrator@administrator-virtual-machine:~$ nano read_file.sh
administrator@administrator-virtual-machine:~$ bash read_file.sh ./read_file.sh

[1] Total size of './read_file.sh': 877 bytes
[2] Number of lines in './read_file.sh': 36
[3] First line:#!/bin/bash
[4] Last line: echo "[4] Last line: $last_line"
administrator@administrator-virtual-machine:~$ █
```

3.4

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
void create_file_with_sentence(unsigned long long free_space) {
    char sentence[256];
    char file_name[256];

    // Step 1: Ask the user for a string (sentence)
    printf("Enter a sentence: ");
    fgets(sentence, sizeof(sentence), stdin);

    // Step 2: Ask the user for the name of the file
    printf("Enter the name of the file (e.g., file.txt): ");
    fgets(file_name, sizeof(file_name), stdin);
    // Remove newline character from the file name
    file_name[strcspn(file_name, "\n")] = 0;

    // Step 3: Calculate the number of times the sentence should be written
    unsigned long long sentence_length = strlen(sentence);
    unsigned long long target_size = free_space / 100000;
    unsigned long long repeat_count = target_size / sentence_length;

    // Step 4: Open the file for writing
    FILE *file = fopen(file_name, "w");
    if (file == NULL) {
        perror("Error opening file");
        exit(EXIT_FAILURE);
    }

    // Step 5: Write the sentence to the file repeat_count times
    for (unsigned long long i = 0; i < repeat_count; i++) {
        fputs(sentence, file);
    }

    // Close the file
    fclose(file);

    printf("File '%s' created with %llu instances of the sentence.\n", file_name, repeat_count);
}

int main() {
    // You can change this free_space value as needed
    unsigned long long free_space = 1000000000; // e.g., 1 GB
    create_file_with_sentence(free_space);

    return 0;
}
```

```
administrator@administrator-virtual-machine:~$ nano create_file_with_sentence.c
administrator@administrator-virtual-machine:~$ gcc -o create_file_with_sentence create_file_with_sentence.c
/usr/bin/ld: /usr/lib/gcc/x86_64-linux-gnu/11/../../../../x86_64-linux-gnu/Srct1.o: in function '_start':
(.text+0x1b): undefined reference to 'main'
collect2: error: ld returned 1 exit status
administrator@administrator-virtual-machine:~$ nano create_file_with_sentence.c
administrator@administrator-virtual-machine:~$ gcc -o create_file_with_sentence create_file_with_sentence.c
administrator@administrator-virtual-machine:~$ ./create_file_with_sentence.c
bash: ./create_file_with_sentence.c: Permission denied
administrator@administrator-virtual-machine:~$ sudo ./create_file_with_sentence.c
[sudo] password for administrator:
sudo: ./create_file_with_sentence.c: command not found
administrator@administrator-virtual-machine:~$ ./create_file_with_sentence
Enter a sentence: hello world
Enter the name of the file (e.g., file.txt): create_file_with_sentence.c
File 'create_file_with_sentence.c' created with 833 instances of the sentence.
administrator@administrator-virtual-machine:~$ █
```

3.5 and 3.6

```
administrator@administrator-virtual-machine: $ mv create_file_with_sentence.c bar
administrator@administrator-virtual-machine: $ rm create_file_with_sentence.c
rm: cannot remove 'create_file_with_sentence.c': No such file or directory
administrator@administrator-virtual-machine: $ rm bar
administrator@administrator-virtual-machine: $
```