

Laporan Praktikum 7

Pengantar Open Source dan Aplikasi

“Arsip File dan Sistem Kompresi”



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Modul VII Arsip File dan Sistem Kompresi

A. Tujuan

1. Mampu menjelaskan manfaat arsip file/direktori.
2. Mampu menjelaskan perbedaan cara dan hasil masing - masing program arsip.
3. Mampu menjelaskan cara berbagi file melalui kompresi dan ekstraksi.

B. Teori Singkat

Menurut saya teori singkat mengenai shell, perintah dasar, dan editor teks, yaitu :

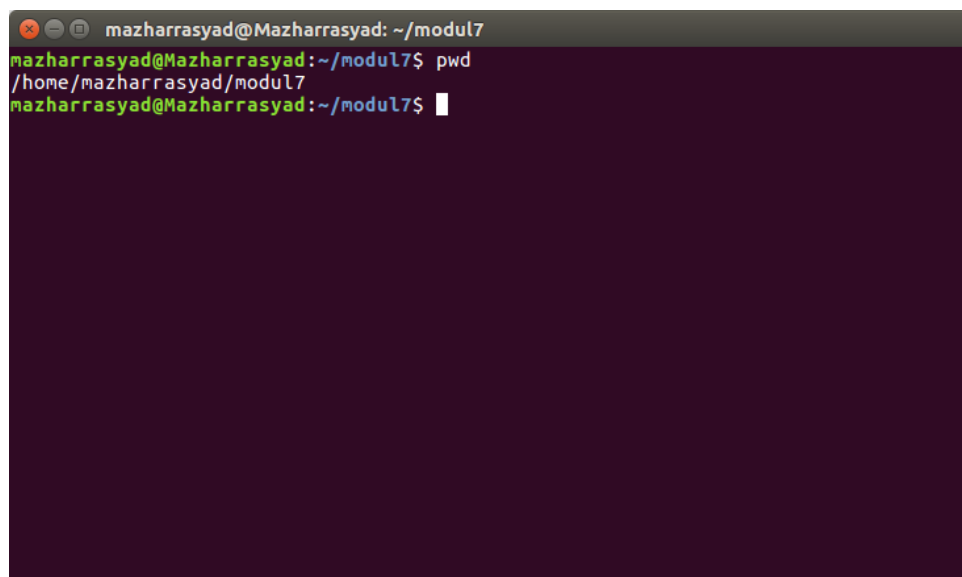
Arsip merupakan proses menggabungkan file - file menjadi satu file. Kompresi merupakan proses mengecilkan ukuran file menjadi lebih kecil. Arsip dan kompresi biasa dilakukan untuk menyimpan hasil backup dan transfer file. Dalam linux proses arsip dan kompresi dapat dilakukan secara terpisah atau bersamaan, maksudnya adalah dapat menjalankan proses arsip atau kompresi secara terpisah atau secara bersamaan. Program untuk melakukan arsip di linux salah satu contohnya adalah tar. Program untuk melakukan kompresi diantaranya gzip, bzip2 dan zip.

C. Langkah – langkah Praktikum

1. Mempersiapkan file untuk praktek

\$ pwd

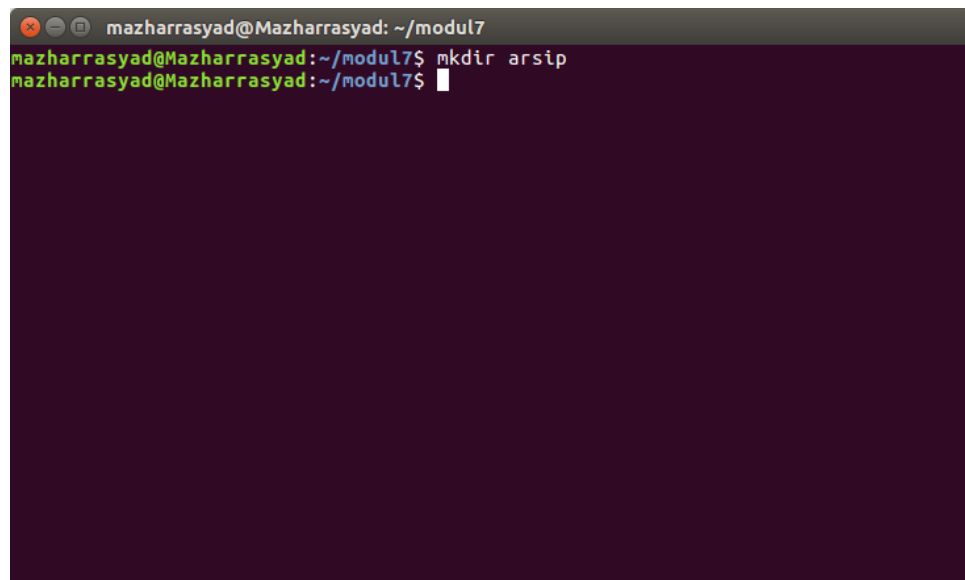
pwd (Print Work Direktori) yaitu Mencetak tempat kerja yang sedang dijalankan



```
mazharrasyad@Mazharrasyad: ~/modul7
mazharrasyad@Mazharrasyad:~/modul7$ pwd
/home/mazharrasyad/modul7
mazharrasyad@Mazharrasyad:~/modul7$
```

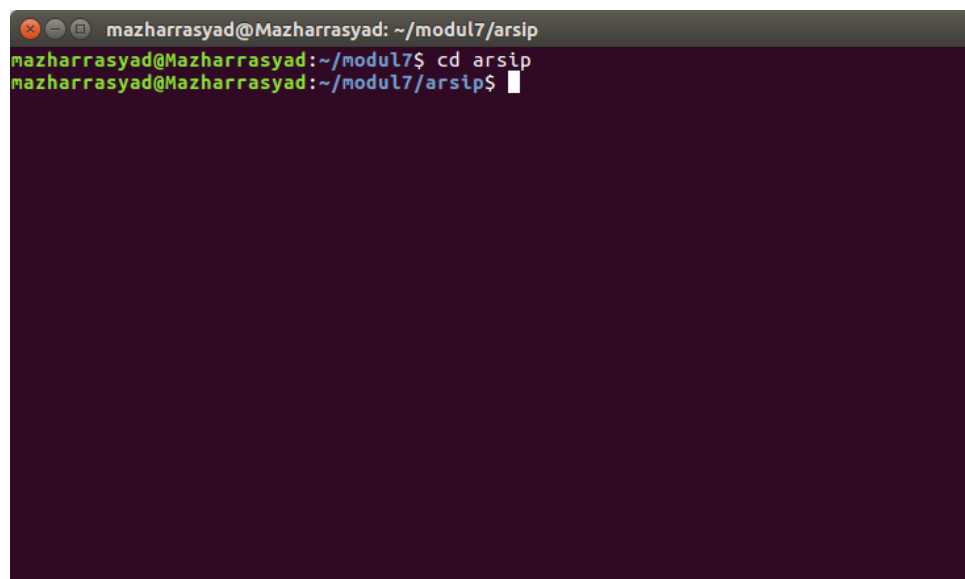
\$ mkdir arsip

mkdir (Make Direktori) yaitu Membuat Direktori dengan nama arsip

A terminal window with a dark purple background. The title bar shows 'mazharrasyad@Mazharrasyad: ~/modul7'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7\$'. The command 'mkdir arsip' has been entered and executed, resulting in a new prompt 'mazharrasyad@Mazharrasyad:~/modul7\$'.

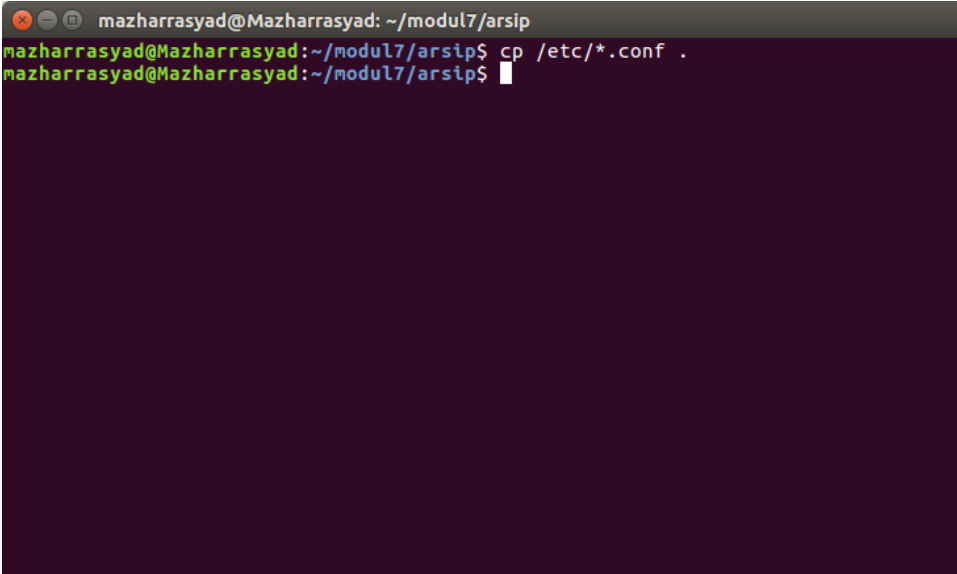
\$ cd arsip

cd (Change Direktori) yaitu mengganti direktori ke direktori arsip

A terminal window with a dark purple background. The title bar shows 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7\$'. The command 'cd arsip' has been entered and executed, resulting in a new prompt 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$'.

```
$ cp /etc/*.conf .
```

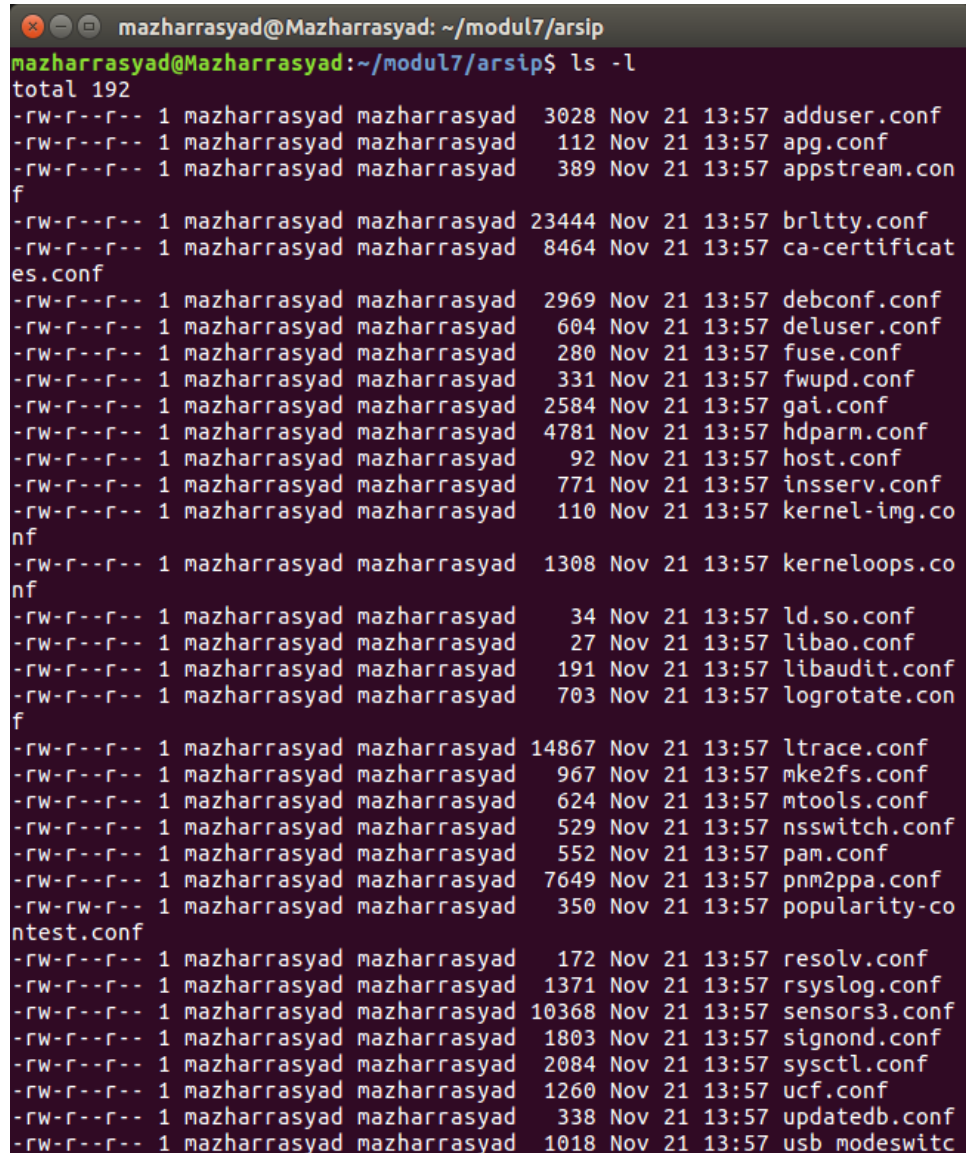
cp (Copy) yaitu menyalin semua file yang berakhiran .conf dari direktori /etc ke tempat .
(. adalah direktori yang sedang dijalankan)

A terminal window with a dark purple background. The title bar shows 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$'. The command 'cp /etc/*.conf .' has been entered and executed, as indicated by the cursor moving to the next line.

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ cp /etc/*.conf .
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l

ls (List) yaitu mendaftarkan file atau direktori yang ada pada direktori tersebut dengan option -l yaitu memberikan info detail tentang file atau direktorinya, pada gambar dibawah melist file dengan detail pada direktori ~/modul7/arsip

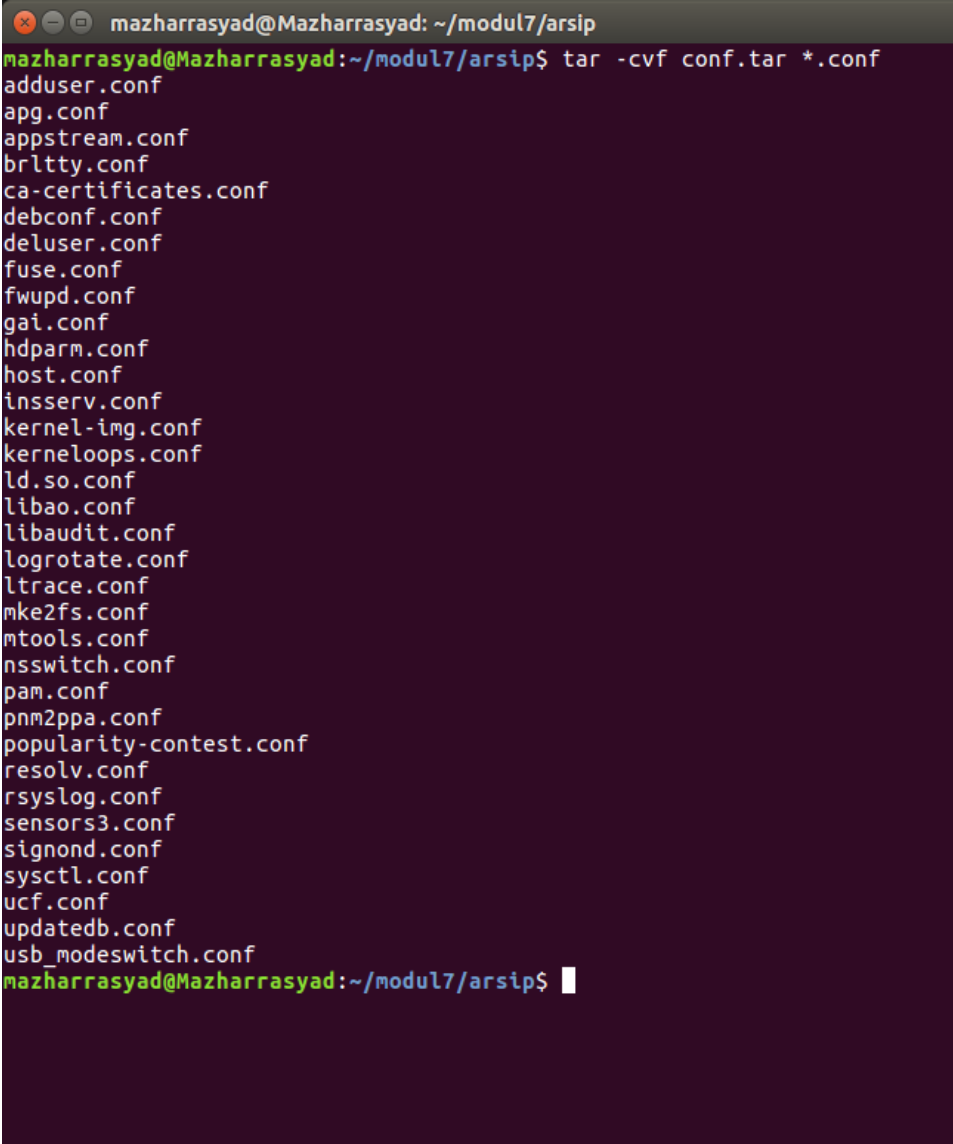


```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 192
-rw-r--r-- 1 mazharrasyad mazharrasyad 3028 Nov 21 13:57 adduser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 112 Nov 21 13:57 apg.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 389 Nov 21 13:57 appstream.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 23444 Nov 21 13:57 brltty.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 8464 Nov 21 13:57 ca-certificates.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2969 Nov 21 13:57 debconf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 604 Nov 21 13:57 deluser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 280 Nov 21 13:57 fuse.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 331 Nov 21 13:57 fwupd.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2584 Nov 21 13:57 gai.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 4781 Nov 21 13:57 hdparm.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 92 Nov 21 13:57 host.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 771 Nov 21 13:57 insserv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 110 Nov 21 13:57 kernel-image.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1308 Nov 21 13:57 kerneloops.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 34 Nov 21 13:57 ld.so.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 27 Nov 21 13:57 libao.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 191 Nov 21 13:57 libaudit.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 703 Nov 21 13:57 logrotate.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 14867 Nov 21 13:57 ltrace.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 967 Nov 21 13:57 mke2fs.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 624 Nov 21 13:57 mtools.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 529 Nov 21 13:57 nsswitch.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 552 Nov 21 13:57 pam.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 7649 Nov 21 13:57 pnm2ppa.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 350 Nov 21 13:57 popularity-contest.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 172 Nov 21 13:57 resolv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1371 Nov 21 13:57 rsyslog.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 10368 Nov 21 13:57 sensors3.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1803 Nov 21 13:57 signond.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2084 Nov 21 13:57 sysctl.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1260 Nov 21 13:57 ucf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 338 Nov 21 13:57 updatedb.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1018 Nov 21 13:57 usb_modeswitch.conf
```

2. Membuat arsip baru

```
$ tar -cvf conf.tar *.conf
```

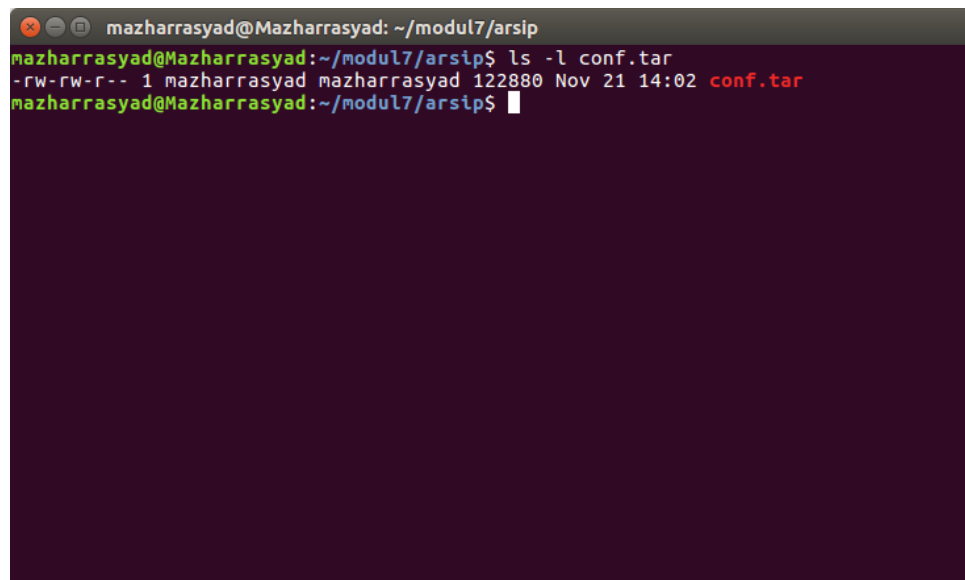
tar yaitu command untuk arsip atau kompresi sebuah file, option -c untuk kompresi, -option -v untuk proses, option -f untuk file arsip, tar [option] [nama.tar] [file], command diatas untuk mengkompresi dengan nama conf.tar untuk semua file dengan akhiran .conf

A terminal window with a dark purple background and light green text. The window title is 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$'. The command 'tar -cvf conf.tar *.conf' has been entered. The terminal lists the files being archived: adduser.conf, appg.conf, appstream.conf, brltty.conf, ca-certificates.conf, debconf.conf, deluser.conf, fuse.conf, fwupd.conf, gai.conf, hdparm.conf, host.conf, insserv.conf, kernel-img.conf, kerneloops.conf, ld.so.conf, libao.conf, libaudit.conf, logrotate.conf, ltrace.conf, mke2fs.conf, mtools.conf, nsswitch.conf, pam.conf, pnm2ppa.conf, popularity-contest.conf, resolv.conf, rsyslog.conf, sensors3.conf, signond.conf, sysctl.conf, ucf.conf, updatedb.conf, and usb_modeswitch.conf. The prompt is now 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$' with a cursor.

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -cvf conf.tar *.conf
adduser.conf
appg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf.tar

Mendaftarkan file dengan detail file conf.tar



```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

3. Melihat isi file arsip

\$ tar -tvf conf.tar

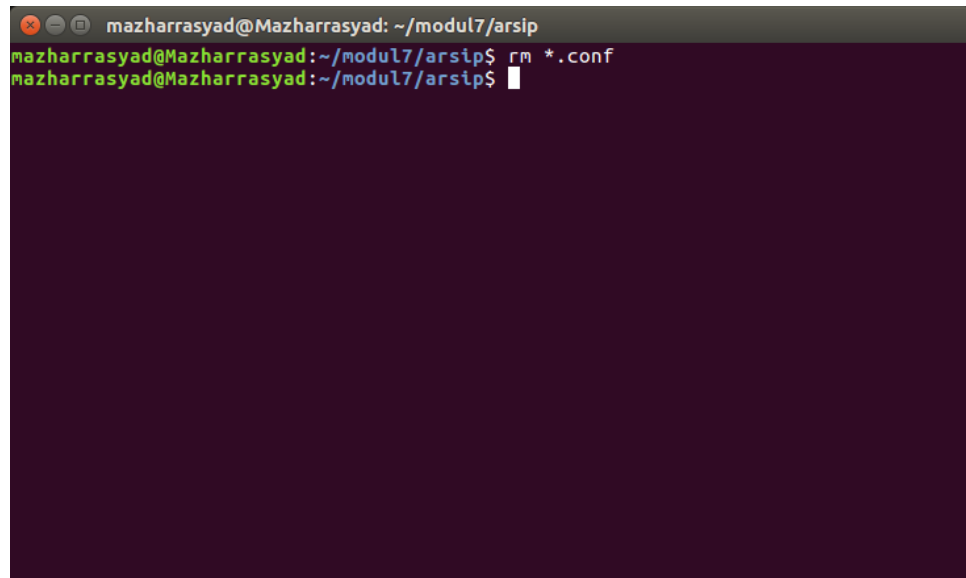
Command diatas digunakan untuk melihat list sebuah file conf.tar dengan option -t

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -tvf conf.tar
-rw-r--r-- mazharrasyad/mazharrasyad 3028 2017-11-21 13:57 adduser.conf
-rw-r--r-- mazharrasyad/mazharrasyad 112 2017-11-21 13:57 apg.conf
-rw-r--r-- mazharrasyad/mazharrasyad 389 2017-11-21 13:57 appstream.conf
-rw-r--r-- mazharrasyad/mazharrasyad 23444 2017-11-21 13:57 brltty.conf
-rw-r--r-- mazharrasyad/mazharrasyad 8464 2017-11-21 13:57 ca-certificates.
conf
-rw-r--r-- mazharrasyad/mazharrasyad 2969 2017-11-21 13:57 debconf.conf
-rw-r--r-- mazharrasyad/mazharrasyad 604 2017-11-21 13:57 deluser.conf
-rw-r--r-- mazharrasyad/mazharrasyad 280 2017-11-21 13:57 fuse.conf
-rw-r--r-- mazharrasyad/mazharrasyad 331 2017-11-21 13:57 fwupd.conf
-rw-r--r-- mazharrasyad/mazharrasyad 2584 2017-11-21 13:57 gai.conf
-rw-r--r-- mazharrasyad/mazharrasyad 4781 2017-11-21 13:57 hdparm.conf
-rw-r--r-- mazharrasyad/mazharrasyad 92 2017-11-21 13:57 host.conf
-rw-r--r-- mazharrasyad/mazharrasyad 771 2017-11-21 13:57 inserv.conf
-rw-r--r-- mazharrasyad/mazharrasyad 110 2017-11-21 13:57 kernel-img.conf
-rw-r--r-- mazharrasyad/mazharrasyad 1308 2017-11-21 13:57 kerneloops.conf
-rw-r--r-- mazharrasyad/mazharrasyad 34 2017-11-21 13:57 ld.so.conf
-rw-r--r-- mazharrasyad/mazharrasyad 27 2017-11-21 13:57 libao.conf
-rw-r--r-- mazharrasyad/mazharrasyad 191 2017-11-21 13:57 libaudit.conf
-rw-r--r-- mazharrasyad/mazharrasyad 703 2017-11-21 13:57 logrotate.conf
-rw-r--r-- mazharrasyad/mazharrasyad 14867 2017-11-21 13:57 ltrace.conf
-rw-r--r-- mazharrasyad/mazharrasyad 967 2017-11-21 13:57 mke2fs.conf
-rw-r--r-- mazharrasyad/mazharrasyad 624 2017-11-21 13:57 mtools.conf
-rw-r--r-- mazharrasyad/mazharrasyad 529 2017-11-21 13:57 nsswitch.conf
-rw-r--r-- mazharrasyad/mazharrasyad 552 2017-11-21 13:57 pam.conf
-rw-r--r-- mazharrasyad/mazharrasyad 7649 2017-11-21 13:57 pnm2ppa.conf
-rw-rw-r-- mazharrasyad/mazharrasyad 350 2017-11-21 13:57 popularity-contest.conf
-rw-r--r-- mazharrasyad/mazharrasyad 172 2017-11-21 13:57 resolv.conf
-rw-r--r-- mazharrasyad/mazharrasyad 1371 2017-11-21 13:57 rsyslog.conf
-rw-r--r-- mazharrasyad/mazharrasyad 10368 2017-11-21 13:57 sensors3.conf
-rw-r--r-- mazharrasyad/mazharrasyad 1803 2017-11-21 13:57 signond.conf
-rw-r--r-- mazharrasyad/mazharrasyad 2084 2017-11-21 13:57 sysctl.conf
-rw-r--r-- mazharrasyad/mazharrasyad 1260 2017-11-21 13:57 ucf.conf
-rw-r--r-- mazharrasyad/mazharrasyad 338 2017-11-21 13:57 updatedb.conf
-rw-r--r-- mazharrasyad/mazharrasyad 1018 2017-11-21 13:57 usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```


4. Mengekstrak file arsip

```
$ rm *.conf
```

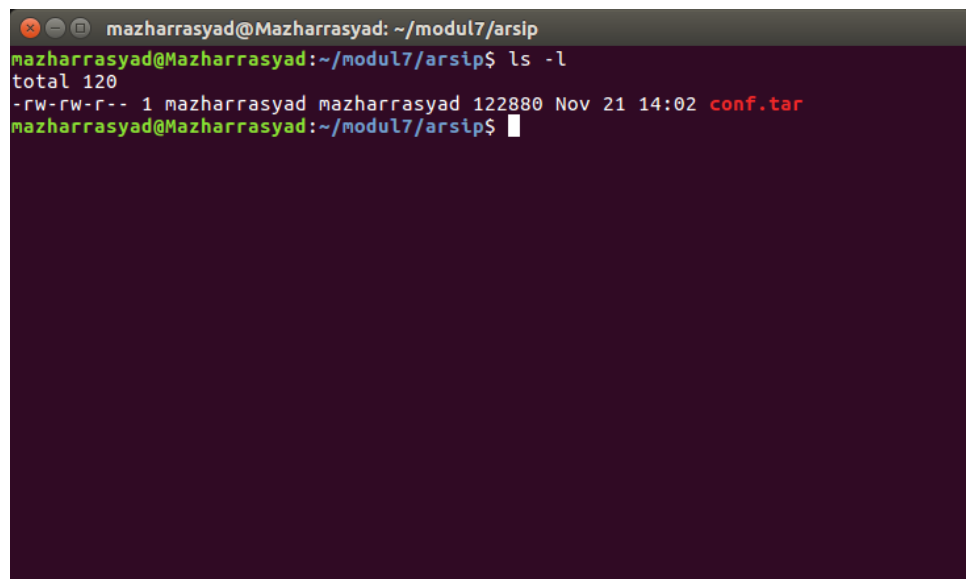
rm (remove) yaitu menghapus semua file (*) dengan akhiran .conf



```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ rm *.conf
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

```
$ ls -l
```

Setelah dihapus maka hasilnya akan seperti gambar dibawah



```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ ls -l
total 120
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

\$ tar -xvf conf.tar

Mengekstrak file .tar dengan menggunakan option -x

```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ tar -xvf conf.tar
adduser.conf
apg.conf
appstream.conf
brlty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

\$ ls -l

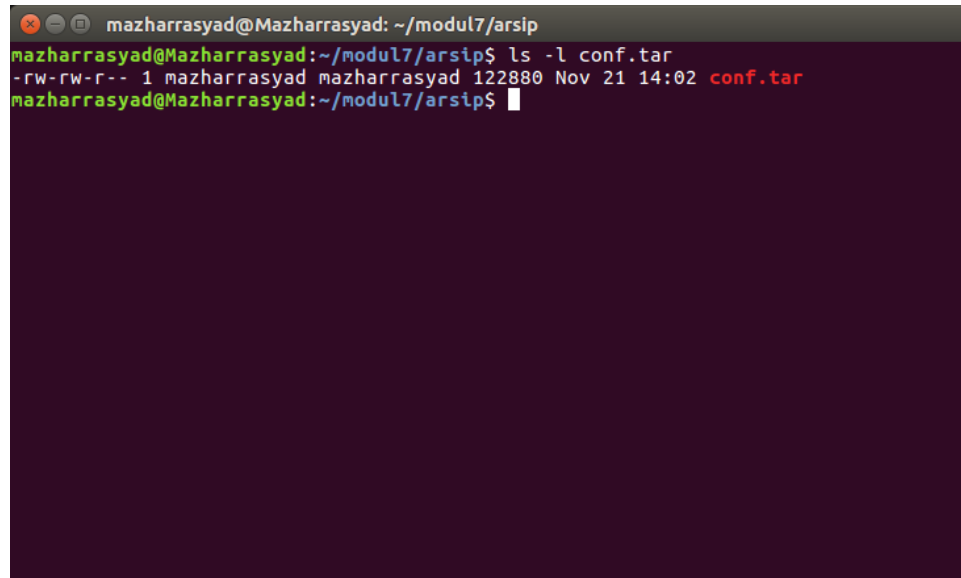
Hasil dari ekstrak conf.tar akan seperti gambar dibawah ini

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 312
-rw-r--r-- 1 mazharrasyad mazharrasyad 3028 Nov 21 13:57 adduser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 112 Nov 21 13:57 apg.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 389 Nov 21 13:57 appstream.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 23444 Nov 21 13:57 brltty.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 8464 Nov 21 13:57 ca-certificates.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
-rw-r--r-- 1 mazharrasyad mazharrasyad 2969 Nov 21 13:57 debconf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 604 Nov 21 13:57 deluser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 280 Nov 21 13:57 fuse.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 331 Nov 21 13:57 fwupd.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2584 Nov 21 13:57 gai.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 4781 Nov 21 13:57 hdparm.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 92 Nov 21 13:57 host.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 771 Nov 21 13:57 insserv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 110 Nov 21 13:57 kernel-img.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1308 Nov 21 13:57 kerneloops.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 34 Nov 21 13:57 ld.so.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 27 Nov 21 13:57 libao.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 191 Nov 21 13:57 libaudit.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 703 Nov 21 13:57 logrotate.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 14867 Nov 21 13:57 ltrace.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 967 Nov 21 13:57 mke2fs.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 624 Nov 21 13:57 mtools.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 529 Nov 21 13:57 nsswitch.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 552 Nov 21 13:57 pam.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 7649 Nov 21 13:57 pnm2ppa.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 350 Nov 21 13:57 popularity-contest.co
nf
-rw-r--r-- 1 mazharrasyad mazharrasyad 172 Nov 21 13:57 resolv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1371 Nov 21 13:57 rsyslog.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 10368 Nov 21 13:57 sensors3.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1803 Nov 21 13:57 signond.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2084 Nov 21 13:57 sysctl.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1260 Nov 21 13:57 ucf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 338 Nov 21 13:57 updatedb.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1018 Nov 21 13:57 usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

5. Mengarsip dan mengkompresi file dengan tar dan gzip secara terpisah (perhatikan ukuran file sebelum dan sesudah dikompres)

```
$ ls -l conf.tar
```

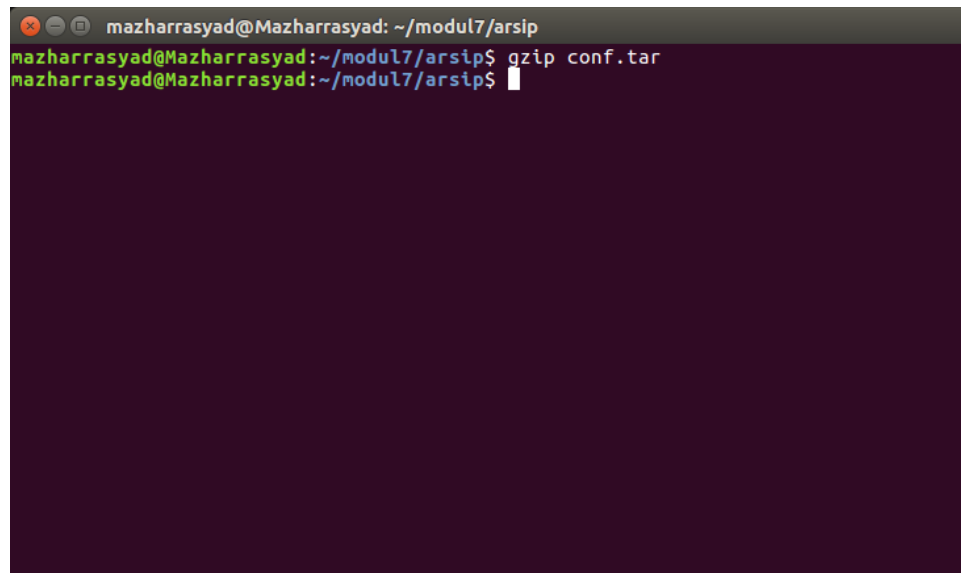
Melist file conf.tar dengan detail pada gambar dibawah terlihat ukurannya 122880



```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ ls -l conf.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

```
$ gzip conf.tar
```

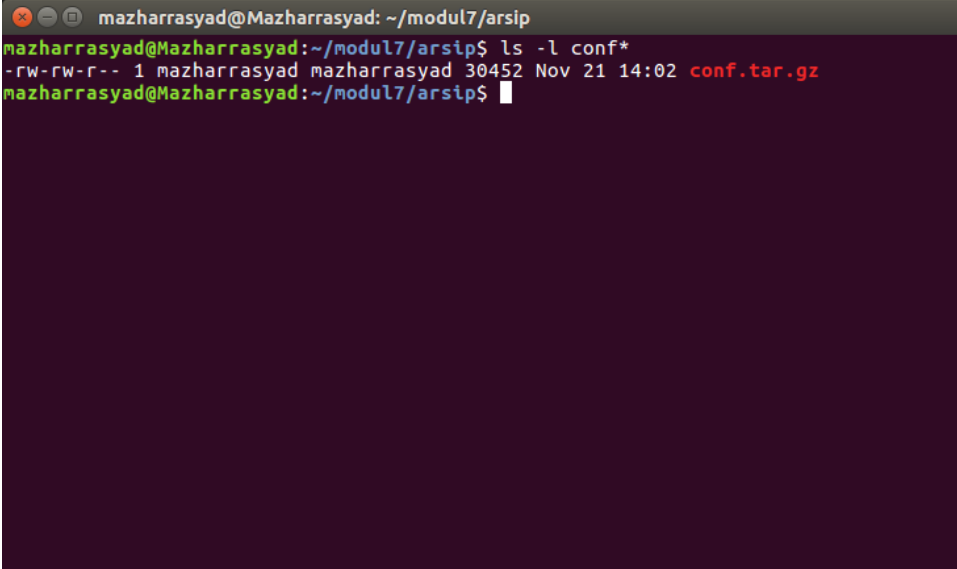
gzip yaitu command untuk kompresi sehingga ukuran file menjadi lebih kecil dari ukuran sebelumnya dan filenya akan menjadi .gz



```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ gzip conf.tar
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf*

Melist data dengan detail file dengan awalan conf untuk semua file (*), pada gambar dibawah terlihat conf.tar.gz karena sebelumnya melakukan command gzip conf.tar

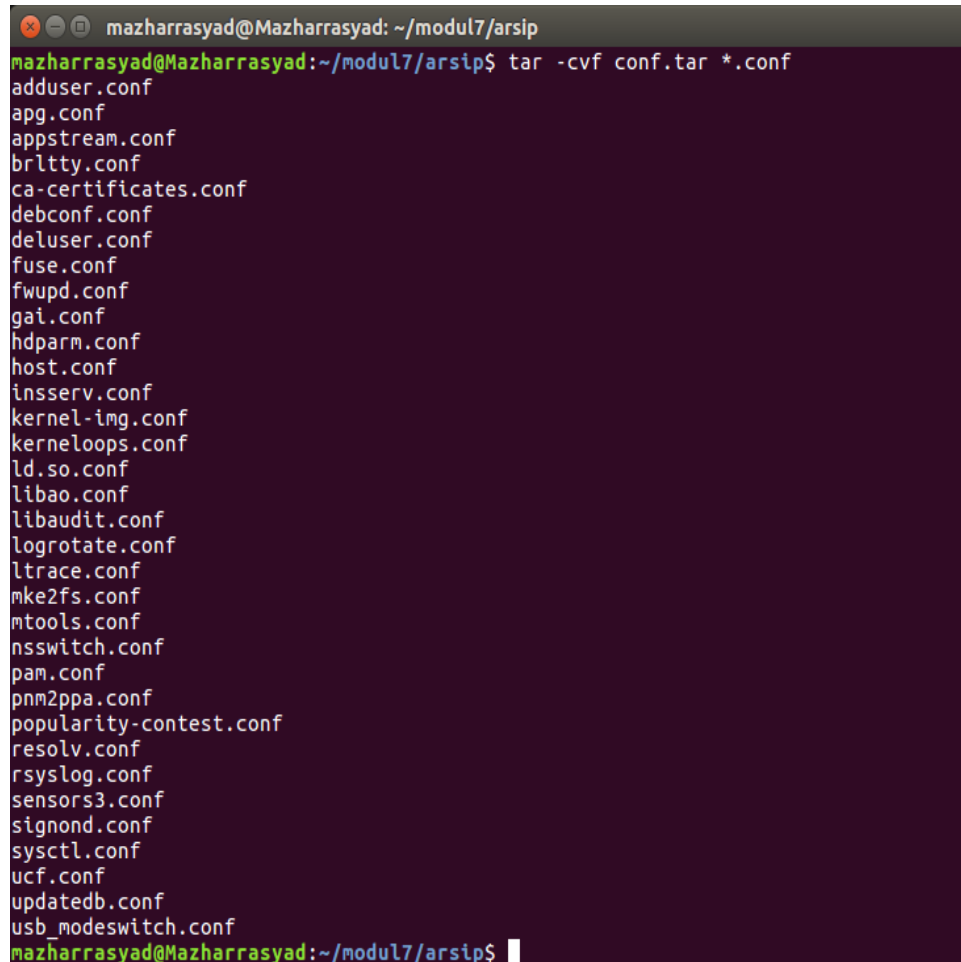
A terminal window with a dark purple background. The title bar shows 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$'. The command 'ls -l conf*' is entered. The output is '-rw-rw-r-- 1 mazharrasyad mazharrasyad 30452 Nov 21 14:02 conf.tar.gz'. The prompt is then 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$' with a cursor.

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30452 Nov 21 14:02 conf.tar.gz
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

6. Mengarsip dan mengkompresi file dengan tar dan bzip2 secara terpisah (perhatikan ukuran file sebelum dan sesudah dikompres)

```
$ tar -cvf conf.tar *.conf
```

Mengarsip dan mengkompresi semua file yang berakhiran .conf menjadi file baru dengan nama conf.tar

A terminal window with a dark purple background and a title bar showing 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The terminal displays the command 'tar -cvf conf.tar *.conf' and its output, which is a list of files ending in '.conf'. The files listed are: adduser.conf, apg.conf, appstream.conf, brltty.conf, ca-certificates.conf, debconf.conf, deluser.conf, fuse.conf, fwupd.conf, gai.conf, hdparm.conf, host.conf, insserv.conf, kernel-img.conf, kerneloops.conf, ld.so.conf, libao.conf, libaudit.conf, logrotate.conf, ltrace.conf, mke2fs.conf, mtools.conf, nsswitch.conf, pam.conf, pnm2ppa.conf, popularity-contest.conf, resolv.conf, rsyslog.conf, sensors3.conf, signond.conf, sysctl.conf, ucf.conf, updatedb.conf, and usb_modeswitch.conf. The prompt 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$' is visible at the bottom.

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -cvf conf.tar *.conf
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf*

Melist file dengan detail file dengan awalan conf untuk semua file (*)

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:08 conf.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30452 Nov 21 14:02 conf.tar.gz
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

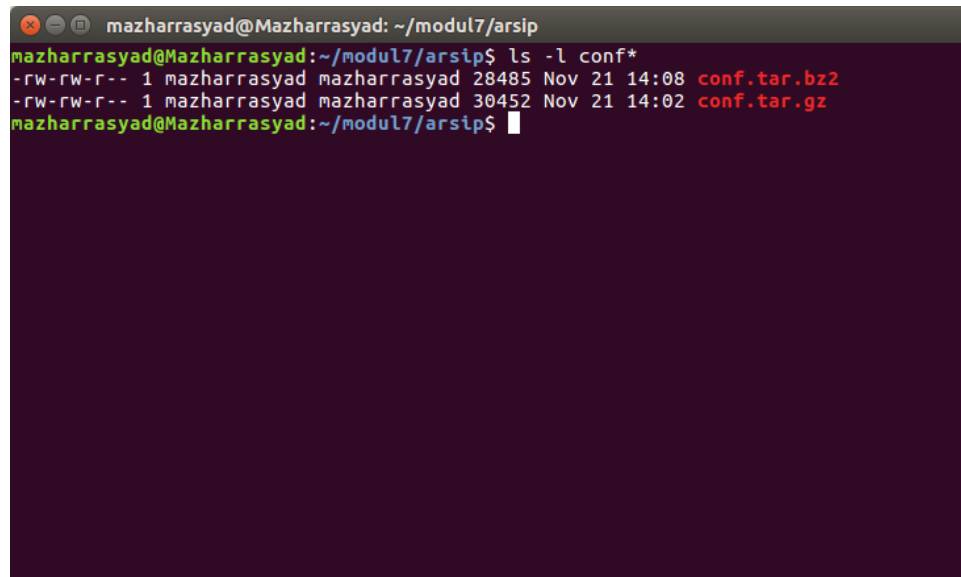
\$ bzip2 conf.tar

bzip2 yaitu untuk kompresi file menjadi lebih kecil menjadi .bz2

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ bzip2 conf.tar
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf*

Melist data conf* pada gambar dibawah terlihat conf.tar.bz2 karena sebelumnya telah melakukan command bzip2 conf.tar

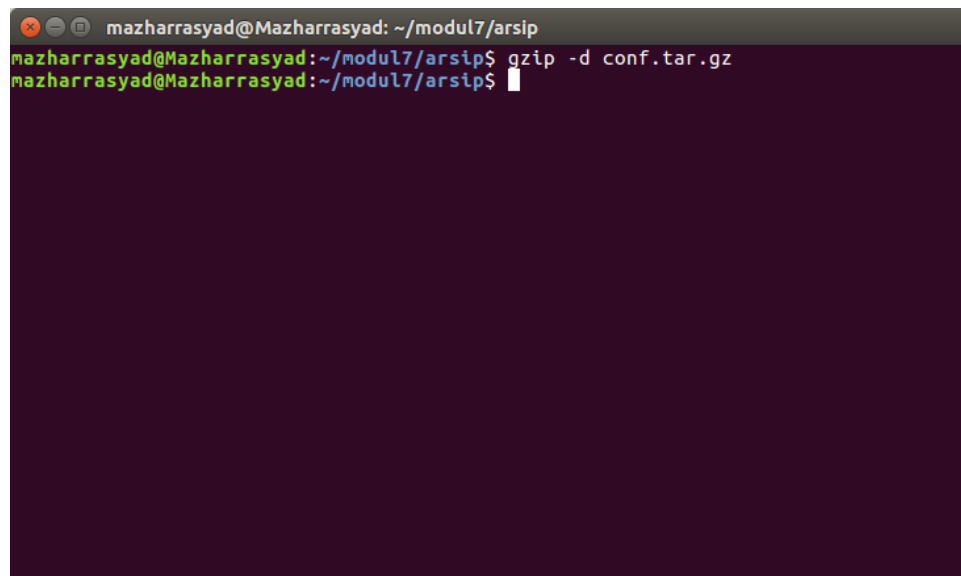


```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:08 conf.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30452 Nov 21 14:02 conf.tar.gz
mazharrasyad@mazharrasyad:~/modul7/arsip$
```

7. Medekompresi file

\$ gzip -d conf.tar.gz

Mengekstrak file conf.tar.gz dengan gzip menggunakan option -d

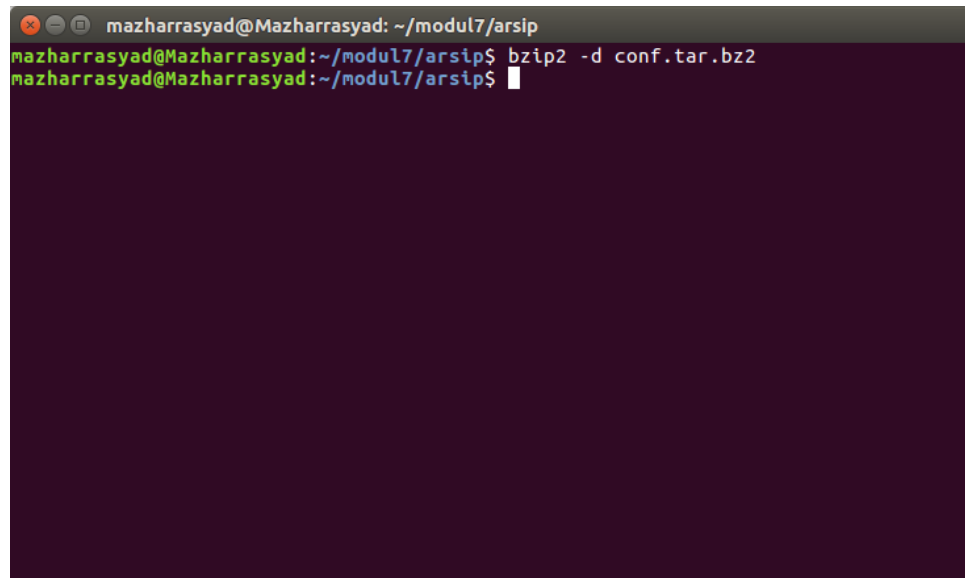


```
mazharrasyad@mazharrasyad: ~/modul7/arsip
mazharrasyad@mazharrasyad:~/modul7/arsip$ gzip -d conf.tar.gz
mazharrasyad@mazharrasyad:~/modul7/arsip$
```



```
$ bzip2 -d conf.tar.bz2
```

Mengekstrak file conf.tar.bz2 dengan bzip2 menggunakan option -d

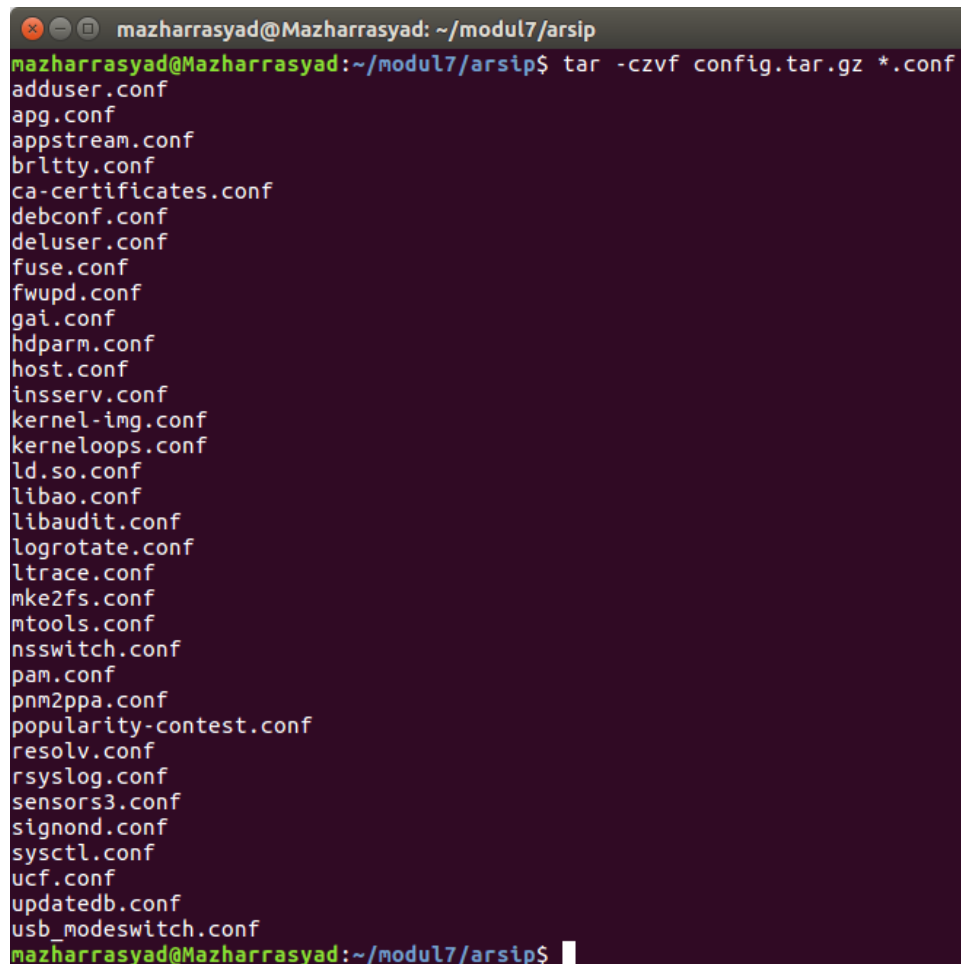
A terminal window with a dark purple background. The title bar shows 'mazharrasyad@Mazharrasyad: ~/modul7/arsip'. The prompt is 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$'. The command 'bzip2 -d conf.tar.bz2' has been entered and executed, resulting in a new prompt 'mazharrasyad@Mazharrasyad:~/modul7/arsip\$' on the next line.

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ bzip2 -d conf.tar.bz2
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

8. Mengarsip dan mengkompresi file dengan tar dan gzip secara bersamaan

```
$ tar -czvf config.tar.gz *.conf
```

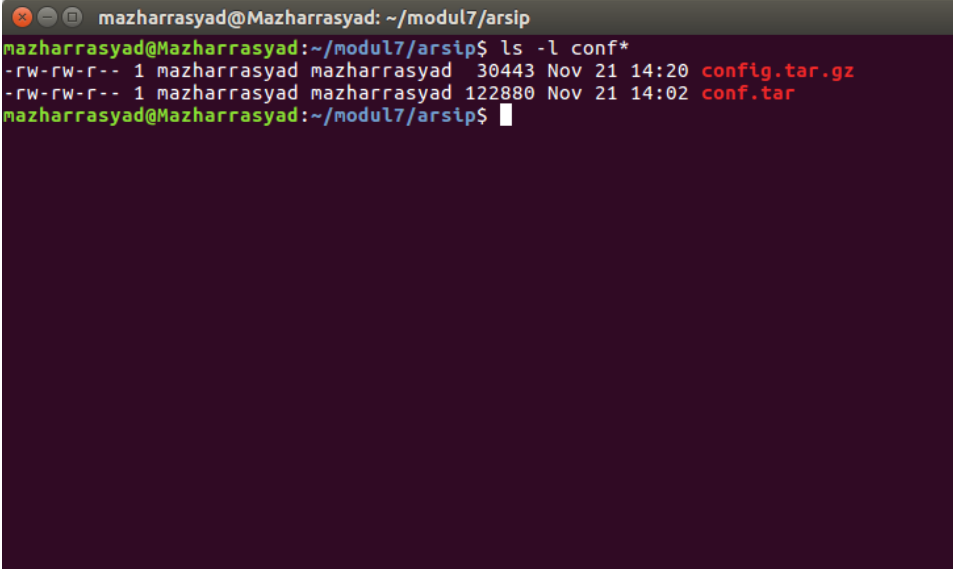
Mengarsip dan kompresi file secara langsung dengan option -z untuk kompresi menjadi gzip dari command tersebut terlihat semua file (*) dengan akhiran .conf menjadi file baru dengan nama config.tar.gz



```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -czvf config.tar.gz *.conf
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf*

Melist file dengan file awalan conf untuk semua file (*) dapat terlihat pada gambar dibawah terdapat file config.tar.gz karena telah dibuat dari command sebelumnya

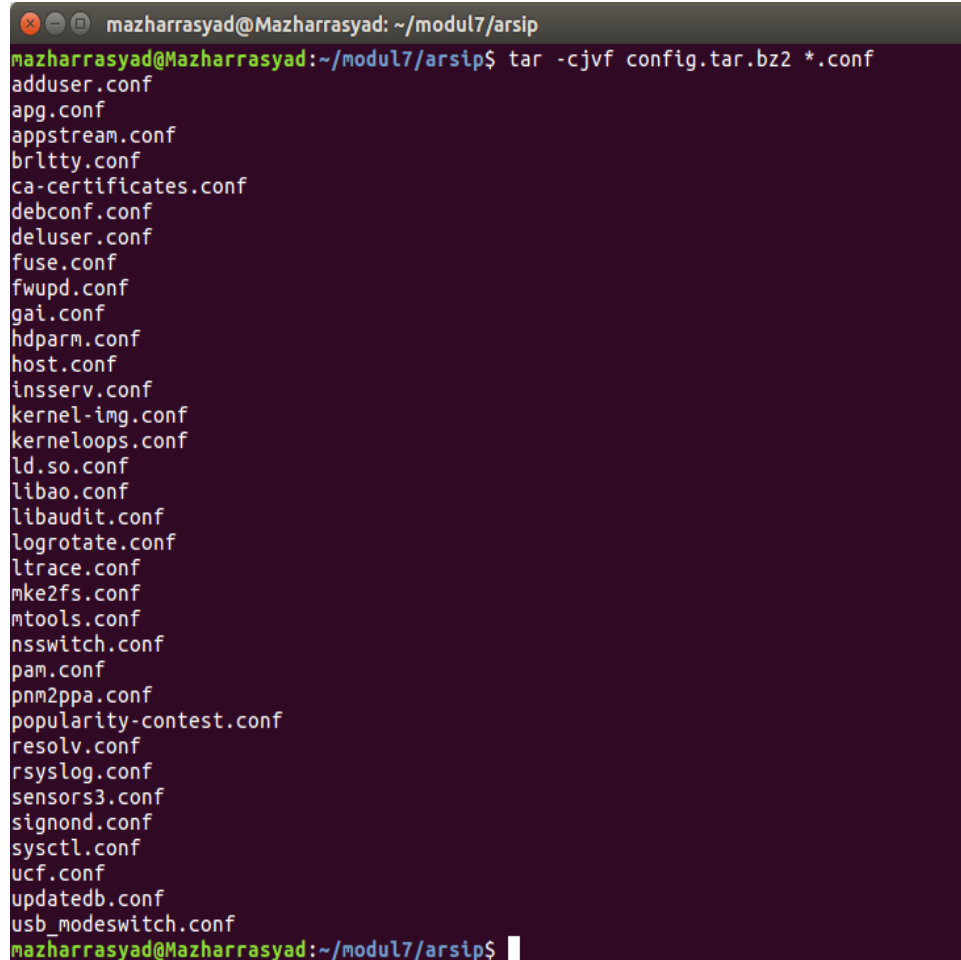


```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

9. Mengarsip dan mengkompresi file dengan tar dan bzip2 secara bersamaan

```
$ tar -cjvf config.tar.bz2 *.conf
```

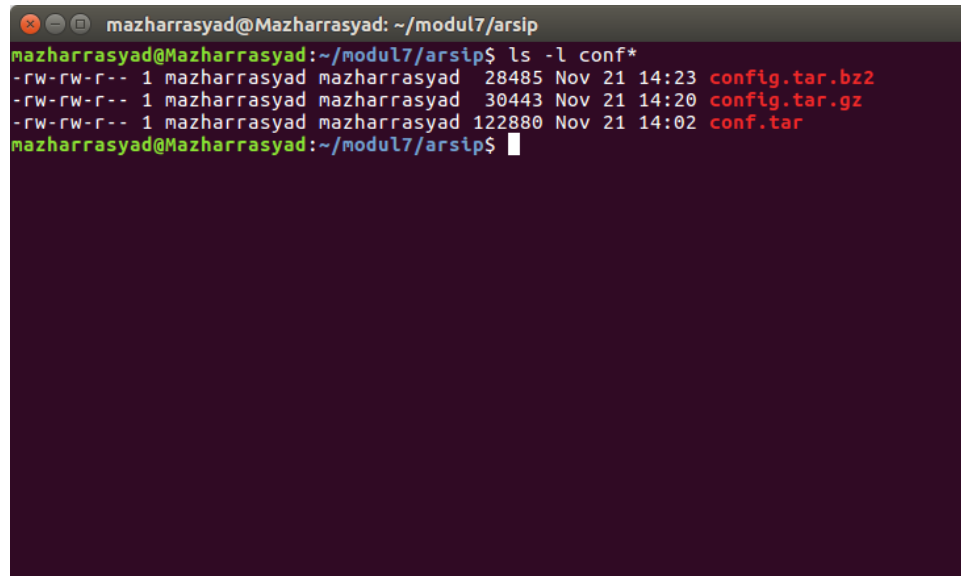
Mengarsip dan kompresi file secara langsung dengan option -j untuk kompresi menjadi bzip2 dari command tersebut terlihat semua file (*) dengan akhiran .conf menjadi file baru dengan nama config.tar.bz2



```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -cjvf config.tar.bz2 *.conf
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l conf*

Melist file dengan file awalan conf untuk semua file (*) dapat terlihat pada gambar dibawah terdapat file config.tar.bz2 karena telah dibuat dari command sebelumnya

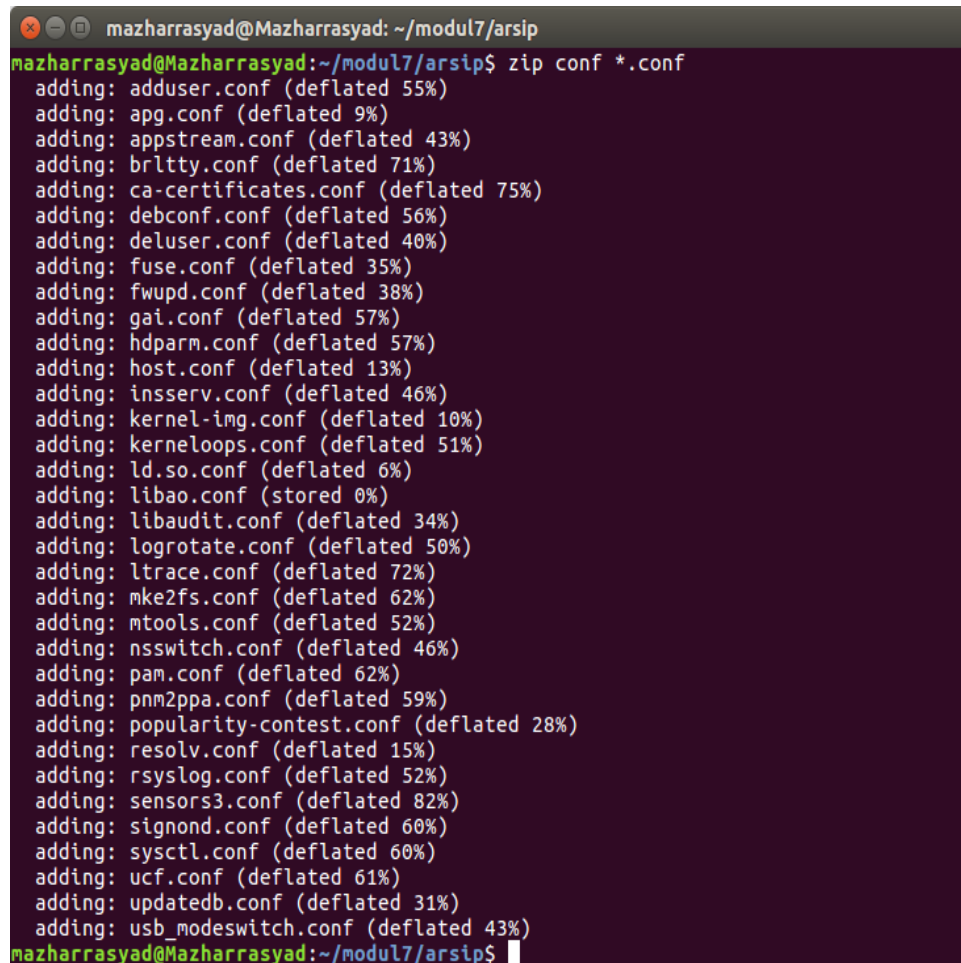


```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:23 config.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

10. Mengarsip dan mengkompresi file dengan zip

\$ zip conf *.conf

Mengarsip dan kompresi dengan command zip dari semua file dengan akhiran .conf menjadi file baru dengan nama conf



```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ zip conf *.conf
adding: adduser.conf (deflated 55%)
adding: appg.conf (deflated 9%)
adding: appstream.conf (deflated 43%)
adding: brltty.conf (deflated 71%)
adding: ca-certificates.conf (deflated 75%)
adding: debconf.conf (deflated 56%)
adding: deluser.conf (deflated 40%)
adding: fuse.conf (deflated 35%)
adding: fwupd.conf (deflated 38%)
adding: gai.conf (deflated 57%)
adding: hdparm.conf (deflated 57%)
adding: host.conf (deflated 13%)
adding: insserv.conf (deflated 46%)
adding: kernel-img.conf (deflated 10%)
adding: kerneloops.conf (deflated 51%)
adding: ld.so.conf (deflated 6%)
adding: libao.conf (stored 0%)
adding: libaudit.conf (deflated 34%)
adding: logrotate.conf (deflated 50%)
adding: ltrace.conf (deflated 72%)
adding: mke2fs.conf (deflated 62%)
adding: mtools.conf (deflated 52%)
adding: nsswitch.conf (deflated 46%)
adding: pam.conf (deflated 62%)
adding: pnm2ppa.conf (deflated 59%)
adding: popularity-contest.conf (deflated 28%)
adding: resolv.conf (deflated 15%)
adding: rsyslog.conf (deflated 52%)
adding: sensors3.conf (deflated 82%)
adding: signond.conf (deflated 60%)
adding: sysctl.conf (deflated 60%)
adding: ucf.conf (deflated 61%)
adding: updatedb.conf (deflated 31%)
adding: usb_modeswitch.conf (deflated 43%)
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

```
$ ls -l conf*
```

Melihat file dengan file awalan conf untuk semua file (*) dapat terlihat pada gambar dibawah terdapat file conf.zip karena telah dibuat dari command sebelumnya

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf*
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:23 config.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 36951 Nov 21 14:24 conf.zip
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

11. Mengekstrak file arsip yang terkompresi

```
$ rm *.conf
```

Menghapus semua file (*) dengan akhiran .conf

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ rm *.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ tar -xvf conf.tar.gz

Mengekstrak file conf.tar.gz dengan command tar menggunakan option -x

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -xvf config.tar.gz
adduser.conf
apg.conf
appstream.conf
brlty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```


\$ ls -l

Melist data dengan detail dapat dilihat hasil dari ekstrak yang tadi dilakukan

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 412
-rw-r--r-- 1 mazharrasyad mazharrasyad 3028 Nov 21 13:57 adduser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 112 Nov 21 13:57 apg.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 389 Nov 21 13:57 appstream.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 23444 Nov 21 13:57 brltty.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 8464 Nov 21 13:57 ca-certificates.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:23 config.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 conf.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 36951 Nov 21 14:24 conf.zip
-rw-r--r-- 1 mazharrasyad mazharrasyad 2969 Nov 21 13:57 debconf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 604 Nov 21 13:57 deluser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 280 Nov 21 13:57 fuse.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 331 Nov 21 13:57 fwupd.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2584 Nov 21 13:57 gai.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 4781 Nov 21 13:57 hdparm.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 92 Nov 21 13:57 host.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 771 Nov 21 13:57 insserv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 110 Nov 21 13:57 kernel-img.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1308 Nov 21 13:57 kerneloops.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 34 Nov 21 13:57 ld.so.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 27 Nov 21 13:57 libao.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 191 Nov 21 13:57 libaudit.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 703 Nov 21 13:57 logrotate.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 14867 Nov 21 13:57 ltrace.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 967 Nov 21 13:57 mke2fs.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 624 Nov 21 13:57 mtools.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 529 Nov 21 13:57 nsswitch.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 552 Nov 21 13:57 pam.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 7649 Nov 21 13:57 pnm2ppa.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 350 Nov 21 13:57 popularity-contest.co
nf
-rw-r--r-- 1 mazharrasyad mazharrasyad 172 Nov 21 13:57 resolv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1371 Nov 21 13:57 rsyslog.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 10368 Nov 21 13:57 sensors3.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1803 Nov 21 13:57 signond.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2084 Nov 21 13:57 sysctl.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1260 Nov 21 13:57 ucf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 338 Nov 21 13:57 updatedb.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1018 Nov 21 13:57 usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ rm *.conf

Menghapus semua file (*) dengan akhiran .conf

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
adduser.conf      gai.conf          nsswitch.conf
apg.conf          hdparm.conf      pam.conf
appstream.conf    host.conf        pnm2ppa.conf
brltty.conf       insserv.conf     popularity-contest.conf
ca-certificates.conf kernel-img.conf  resolv.conf
config.tar.bz2    kerneloops.conf  rsyslog.conf
config.tar.gz     ld.so.conf       sensors3.conf
conf.tar          libao.conf       signond.conf
conf.zip          libaudit.conf    sysctl.conf
debconf.conf      logrotate.conf   ucf.conf
deluser.conf      ltrace.conf      updatedb.conf
fuse.conf         mke2fs.conf      usb_modeswitch.conf
fwupd.conf        mtools.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$ rm *.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
config.tar.bz2  config.tar.gz  conf.tar  conf.zip
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ tar -xvf conf.tar.bz2

Mengekstrak file conf.tar.bz2 dengan command tar menggunakan option -x

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -xvf config.tar.bz2
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l

Melihat data dengan detail dapat dilihat hasil dari ekstrak yang tadi dilakukan

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 412
-rw-r--r-- 1 mazharrasyad mazharrasyad 3028 Nov 21 13:57 adduser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 112 Nov 21 13:57 appg.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 389 Nov 21 13:57 appstream.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 23444 Nov 21 13:57 brltty.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 8464 Nov 21 13:57 ca-certificates.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:23 config.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 config.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 36951 Nov 21 14:24 config.zip
-rw-r--r-- 1 mazharrasyad mazharrasyad 2969 Nov 21 13:57 debconf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 604 Nov 21 13:57 deluser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 280 Nov 21 13:57 fuse.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 331 Nov 21 13:57 fwupd.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2584 Nov 21 13:57 gai.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 4781 Nov 21 13:57 hdparm.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 92 Nov 21 13:57 host.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 771 Nov 21 13:57 insserv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 110 Nov 21 13:57 kernel-img.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1308 Nov 21 13:57 kerneloops.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 34 Nov 21 13:57 ld.so.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 27 Nov 21 13:57 libao.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 191 Nov 21 13:57 libaudit.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 703 Nov 21 13:57 logrotate.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 14867 Nov 21 13:57 ltrace.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 967 Nov 21 13:57 mke2fs.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 624 Nov 21 13:57 mtools.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 529 Nov 21 13:57 nsswitch.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 552 Nov 21 13:57 pam.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 7649 Nov 21 13:57 pnm2ppa.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 350 Nov 21 13:57 popularity-contest.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 172 Nov 21 13:57 resolv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1371 Nov 21 13:57 rsyslog.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 10368 Nov 21 13:57 sensors3.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1803 Nov 21 13:57 signond.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2084 Nov 21 13:57 sysctl.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1260 Nov 21 13:57 ucf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 338 Nov 21 13:57 updatedb.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1018 Nov 21 13:57 usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ rm *.conf

Menghapus semua file (*) dengan akhiran .conf

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
adduser.conf      gai.conf          nsswitch.conf
appg.conf         hdparm.conf      pam.conf
appstream.conf    host.conf        pnm2ppa.conf
brltty.conf       insserv.conf     popularity-contest.conf
ca-certificates.conf kernel-img.conf  resolv.conf
config.tar.bz2    kerneloops.conf  rsyslog.conf
config.tar.gz     ld.so.conf       sensors3.conf
config.tar        libao.conf       signond.conf
config.zip        libaudit.conf    sysctl.conf
debconf.conf      logrotate.conf   ucf.conf
deluser.conf      ltrace.conf      updatedb.conf
fuse.conf         mke2fs.conf      usb_modeswitch.conf
fwupd.conf        mtools.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$ rm *.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
config.tar.bz2  config.tar.gz  config.tar  config.zip
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ unzip conf.zip

Mengekstrak file conf.zip dengan command unzip

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ unzip conf.zip
Archive:  conf.zip
  inflating: adduser.conf
  inflating: apg.conf
  inflating: appstream.conf
  inflating: brltty.conf
  inflating: ca-certificates.conf
  inflating: debconf.conf
  inflating: deluser.conf
  inflating: fuse.conf
  inflating: fwupd.conf
  inflating: gai.conf
  inflating: hdparm.conf
  inflating: host.conf
  inflating: insserv.conf
  inflating: kernel-img.conf
  inflating: kerneloops.conf
  inflating: ld.so.conf
  extracting: libao.conf
  inflating: libaudit.conf
  inflating: logrotate.conf
  inflating: ltrace.conf
  inflating: mke2fs.conf
  inflating: mtools.conf
  inflating: nsswitch.conf
  inflating: pam.conf
  inflating: pnm2ppa.conf
  inflating: popularity-contest.conf
  inflating: resolv.conf
  inflating: rsyslog.conf
  inflating: sensors3.conf
  inflating: signond.conf
  inflating: sysctl.conf
  inflating: ucf.conf
  inflating: updatedb.conf
  inflating: usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

\$ ls -l

Melihat data dengan detail dapat dilihat hasil dari ekstrak yang tadi dilakukan

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 412
-rw-r--r-- 1 mazharrasyad mazharrasyad 3028 Nov 21 13:57 adduser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 112 Nov 21 13:57 apg.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 389 Nov 21 13:57 appstream.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 23444 Nov 21 13:57 brltty.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 8464 Nov 21 13:57 ca-certificates.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28485 Nov 21 14:23 config.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 config.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 122880 Nov 21 14:02 config.tar
-rw-rw-r-- 1 mazharrasyad mazharrasyad 36951 Nov 21 14:24 config.zip
-rw-r--r-- 1 mazharrasyad mazharrasyad 2969 Nov 21 13:57 debconf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 604 Nov 21 13:57 deluser.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 280 Nov 21 13:57 fuse.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 331 Nov 21 13:57 fwupd.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2584 Nov 21 13:57 gal.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 4781 Nov 21 13:57 hdparm.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 92 Nov 21 13:57 host.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 771 Nov 21 13:57 insserv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 110 Nov 21 13:57 kernel-img.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1308 Nov 21 13:57 kerneloops.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 34 Nov 21 13:57 ld.so.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 27 Nov 21 13:57 libao.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 191 Nov 21 13:57 libaudit.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 703 Nov 21 13:57 logrotate.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 14867 Nov 21 13:57 ltrace.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 967 Nov 21 13:57 mke2fs.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 624 Nov 21 13:57 mtools.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 529 Nov 21 13:57 nsswitch.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 552 Nov 21 13:57 pam.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 7649 Nov 21 13:57 pnm2ppa.conf
-rw-rw-r-- 1 mazharrasyad mazharrasyad 350 Nov 21 13:57 popularity-contest.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 172 Nov 21 13:57 resolv.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1371 Nov 21 13:57 rsyslog.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 10368 Nov 21 13:57 sensors3.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1803 Nov 21 13:57 signond.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 2084 Nov 21 13:57 sysctl.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1260 Nov 21 13:57 ucf.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 338 Nov 21 13:57 updatedb.conf
-rw-r--r-- 1 mazharrasyad mazharrasyad 1018 Nov 21 13:57 usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

D. Tugas

1. Perhatikan data di bawah ini!

```
$ ls -l
```

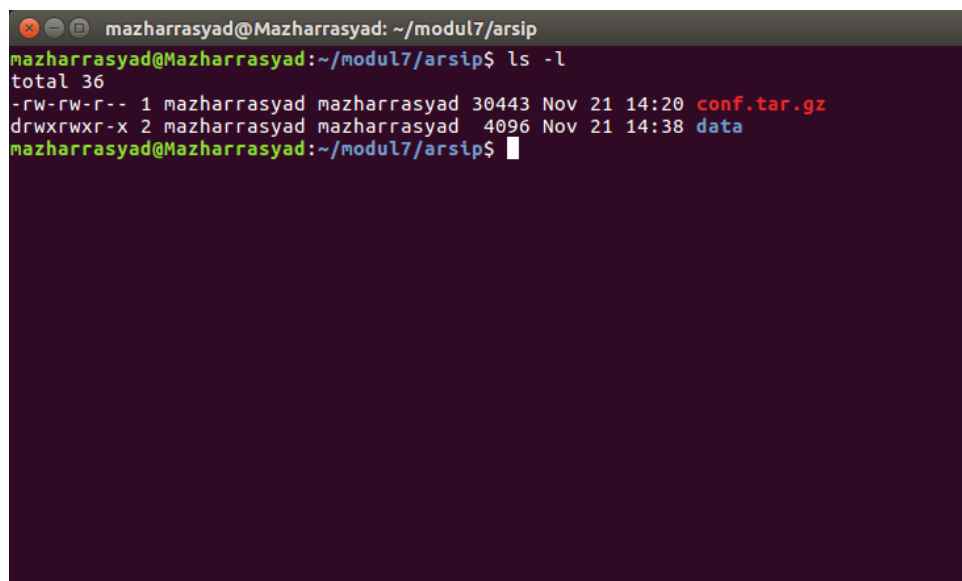
```
total 36
```

```
-rw-rw-r-- 1 badu badu 32189 Nov 6 12:04 conf.tar.gz
```

```
drwxrwxr-x 2 badu badu 4096 Nov 6 12:03 dat
```

Tuliskan perintah untuk mengekstrak file conf.tar.gz ke direktori data tanpa harus menyalin file conf.tar.gz ke direktori data terlebih dahulu! (Pelajari opsi-opsi tar melalui perintah man)

Terdapat file conf.tar.gz dan direktori data



```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l
total 36
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30443 Nov 21 14:20 conf.tar.gz
drwxrwxr-x 2 mazharrasyad mazharrasyad 4096 Nov 21 14:38 data
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Cara untuk mengekstrak file kedalam direktori data dapat menggunakan option -C [nama_direktori] sehingga commandnya tar -xvf conf.tar.gz -C data/

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -xvf conf.tar.gz -C data/
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Dapat dilihat file yang ada pada direktori data sudah terekstrak dari file conf.tar.gz

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls data
adduser.conf      insserv.conf      pnm2ppa.conf
apg.conf          kernel-img.conf   popularity-contest.conf
appstream.conf    kerneloops.conf   resolv.conf
brltty.conf       ld.so.conf        rsyslog.conf
ca-certificates.conf libao.conf        sensors3.conf
debconf.conf      libaudit.conf     signond.conf
deluser.conf      logrotate.conf    sysctl.conf
fuse.conf         ltrace.conf       ucf.conf
fwupd.conf        mke2fs.conf       updatedb.conf
gai.conf          mtools.conf       usb_modeswitch.conf
hdparm.conf       nsswitch.conf
host.conf         pam.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

2. Pada saat ini mulai banyak digunakan sistem kompresi xz. Pelajari sintaksnya melalui perintah man. Tuliskan perintah untuk mengarsip dan mengompres file dengan perintah tar dan xz! Bandingkan hasil kompresinya dengan kompresi yg sudah dikenal sebelumnya yaitu gzip, bzip2 dan zip. Mana hasil kompresinya yang paling kecil ?

Terdapat file – file berakhiran .conf

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
adduser.conf      insserv.conf      pnm2ppa.conf
apg.conf          kernel-img.conf   popularity-contest.conf
appstream.conf    kerneloops.conf   resolv.conf
brltty.conf       ld.so.conf        rsyslog.conf
ca-certificates.conf libao.conf        sensors3.conf
debconf.conf      libaudit.conf     signond.conf
deluser.conf      logrotate.conf    sysctl.conf
fuse.conf         ltrace.conf       ucf.conf
fwupd.conf        mke2fs.conf       updatedb.conf
gai.conf          mtools.conf       usb_modeswitch.conf
hdparm.conf       nsswitch.conf
host.conf         pam.conf
```


Mengarsip dan kompresi dengan command `tar -czvf` dengan nama file baru `conf.tar.gz` untuk semua file (*) dengan akhiran `.conf` yang artinya menggunakan `gzip`

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -czvf conf.tar.gz *.conf
adduser.conf
app.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Mengarsip dan kompresi dengan command tar -cjvf dengan nama file baru conf.tar.bz2 untuk semua file (*) dengan akhiran .conf yang artinya menggunakan bzip2

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar -cjvf conf.tar.bz2 *.conf
adduser.conf
apg.conf
appstream.conf
brltty.conf
ca-certificates.conf
debconf.conf
deluser.conf
fuse.conf
fwupd.conf
gai.conf
hdparm.conf
host.conf
insserv.conf
kernel-img.conf
kerneloops.conf
ld.so.conf
libao.conf
libaudit.conf
logrotate.conf
ltrace.conf
mke2fs.conf
mtools.conf
nsswitch.conf
pam.conf
pnm2ppa.conf
popularity-contest.conf
resolv.conf
rsyslog.conf
sensors3.conf
signond.conf
sysctl.conf
ucf.conf
updatedb.conf
usb_modeswitch.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Mengarsip dan kompresi dengan command zip dengan nama file baru conf untuk semua file (*) dengan akhiran .conf yang artinya menggunakan zip

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ zip conf *.conf
updating: adduser.conf (deflated 55%)
updating: apg.conf (deflated 9%)
updating: appstream.conf (deflated 43%)
updating: brltty.conf (deflated 71%)
updating: ca-certificates.conf (deflated 75%)
updating: debconf.conf (deflated 56%)
updating: deluser.conf (deflated 40%)
updating: fuse.conf (deflated 35%)
updating: fwupd.conf (deflated 38%)
updating: gai.conf (deflated 57%)
updating: hdparm.conf (deflated 57%)
updating: host.conf (deflated 13%)
updating: insserv.conf (deflated 46%)
updating: kernel-img.conf (deflated 10%)
updating: kerneloops.conf (deflated 51%)
updating: ld.so.conf (deflated 6%)
updating: libao.conf (stored 0%)
updating: libaudit.conf (deflated 34%)
updating: logrotate.conf (deflated 50%)
updating: ltrace.conf (deflated 72%)
updating: mke2fs.conf (deflated 62%)
updating: mtools.conf (deflated 52%)
updating: nsswitch.conf (deflated 46%)
updating: pam.conf (deflated 62%)
updating: pnm2ppa.conf (deflated 59%)
updating: popularity-contest.conf (deflated 28%)
updating: resolv.conf (deflated 15%)
updating: rsyslog.conf (deflated 52%)
updating: sensors3.conf (deflated 82%)
updating: signond.conf (deflated 60%)
updating: sysctl.conf (deflated 60%)
updating: ucf.conf (deflated 61%)
updating: updatedb.conf (deflated 31%)
updating: usb_modeswitch.conf (deflated 43%)
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Mengarsip dan kompresi dengan command tar c dengan nama file baru conf.tar.xz untuk semua file (*) dengan akhiran .conf yang artinya menggunakan xz

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ tar c *.conf | xz > conf.tar.xz
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Terdapat file hasil arsip dan kompresi conf.tar.bz2, conf.tar.gz, conf.tar.xz, conf.zip

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls
adduser.conf      gai.conf          nsswitch.conf
apg.conf          hdparm.conf      pam.conf
appstream.conf    host.conf        pnm2ppa.conf
brltty.conf       insserv.conf     popularity-contest.conf
ca-certificates.conf kernel-img.conf  resolv.conf
conf.tar.bz2      kerneloops.conf  rsyslog.conf
conf.tar.gz       ld.so.conf       sensors3.conf
conf.tar.xz       libao.conf       signond.conf
conf.zip          libaudit.conf    sysctl.conf
debconf.conf      logrotate.conf   ucf.conf
deluser.conf      ltrace.conf      updatedb.conf
fuse.conf         mke2fs.conf      usb_modeswitch.conf
fwupd.conf        mtools.conf
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Pada gambar dibawah terlihat ukuran yang lebih kecil hingga paling besar yaitu dari file - file .zip < .gz < .bz2 < xz yang artinya .zip merupakan kompresi yang paling besar dan .xz merupakan kompresi yang paling kecil

```
mazharrasyad@Mazharrasyad: ~/modul7/arsip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf.tar.gz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 30429 Nov 21 15:58 conf.tar.gz
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf.tar.bz2
-rw-rw-r-- 1 mazharrasyad mazharrasyad 28475 Nov 21 15:57 conf.tar.bz2
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf.zip
-rw-rw-r-- 1 mazharrasyad mazharrasyad 36935 Nov 21 15:57 conf.zip
mazharrasyad@Mazharrasyad:~/modul7/arsip$ ls -l conf.tar.xz
-rw-rw-r-- 1 mazharrasyad mazharrasyad 27520 Nov 24 14:11 conf.tar.xz
mazharrasyad@Mazharrasyad:~/modul7/arsip$
```

Kesimpulan

Arsip dan Kompresi digunakan untuk menyatukan file – file dan kemudian memperkecil ukurannya, pada linux untuk mengarsip atau mengkompresi dapat dilakukan melalui terminal dengan command tar yang diberikan option – option tambahan yang diperlukan. Kompresi file pada linux terbagi menjadi 4 yaitu .gz, .bz2, .zip, .xz dan kompresinya berbeda – beda.