

## T1

```
user@AA3209-Ubuntu:~/h1$ tar -cf dir2_backup.tar dir2
user@AA3209-Ubuntu:~/h1$ cd dir2
user@AA3209-Ubuntu:~/h1/dir2$ ls
NewFileX1.txt  dir2_backup.tar  file2.txt  file3.txt  file4.txt
user@AA3209-Ubuntu:~/h1/dir2$ gzip dir2_backup.txt
gzip: dir2_backup.txt: No such file or directory
user@AA3209-Ubuntu:~/h1/dir2$ gzip dir2_backup.tar
user@AA3209-Ubuntu:~/h1/dir2$ ls
NewFileX1.txt  dir2_backup.tar.gz  file2.txt  file3.txt  file4.txt
user@AA3209-Ubuntu:~/h1/dir2$
```

## T2

```
user@AA3209-Ubuntu:~/h1/dir1$ nano file2.txt
GNU nano 4.8                                file2.txt
[ Read 0 lines ]
^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify  ^C Cur Pos
```

```
GNU nano 4.8                                file2.txt                                Modified
Tässä tehdään nyt Linuxin tehtäviä :)

Save file under DIFFERENT NAME?
Y Yes
N No      ^C Cancel
```

```
user@AA3209-Ubuntu:~/h1/dir1$ ls
NewFileX1.txt  file2.txt  file3.txt  file4.txt  uusifile2.txt
user@AA3209-Ubuntu:~/h1/dir1$
```

### T3

```
user@AA3209-Ubuntu:~/h1/dir1$ less uusifile2.txt
```

```
user@AA3209-Ubuntu: ~/h1/dir1

Tässä tehdään nyt Linuxin tehtäviä :)
uusifile2.txt (END)
```

## SEARCHING

<u>/pattern</u>	* Search forward for ( <u>N</u> -th) matching line.
<u>?pattern</u>	* Search backward for ( <u>N</u> -th) matching line.
<u>n</u>	* Repeat previous search (for <u>N</u> -th occurrence).
<u>N</u>	* Repeat previous search in reverse direction.
<u>ESC-n</u>	* Repeat previous search, spanning files.
<u>ESC-N</u>	* Repeat previous search, reverse dir. & spanning files.
<u>ESC-u</u>	Undo (toggle) search highlighting.
<u>&amp;pattern</u>	* Display only matching lines

-----  
A search pattern may begin with one or more of:

<u>^N</u> or <u>!</u>	Search for NON-matching lines.
<u>^E</u> or <u>*</u>	Search multiple files (pass thru END OF FILE).
<u>^F</u> or <u>@</u>	Start search at FIRST file (for /) or last file (for ?).
<u>^K</u>	Highlight matches, but don't move (KEEP position).
<u>^R</u>	Don't use REGULAR EXPRESSIONS.

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## JUMPING

### T4

```
user@AA3209-Ubuntu:~$ wget http://student.labranet.jamk.fi/~hannt/apache/httpd-2.4.41.tar.gz
--2021-02-22 01:20:27-- http://student.labranet.jamk.fi/~hannt/apache/httpd-2.4.41.tar.gz
Resolving student.labranet.jamk.fi (student.labranet.jamk.fi)... 195.148.26.130
Connecting to student.labranet.jamk.fi (student.labranet.jamk.fi)|195.148.26.130|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://student.labranet.jamk.fi/~hannt/apache/httpd-2.4.41.tar.gz [following]
--2021-02-22 01:20:27-- https://student.labranet.jamk.fi/~hannt/apache/httpd-2.4.41.tar.gz
Connecting to student.labranet.jamk.fi (student.labranet.jamk.fi)|195.148.26.130|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9267917 (8.8M) [application/x-gzip]
Saving to: 'httpd-2.4.41.tar.gz'

httpd-2.4.41.tar.gz 100%[=====>] 8.84M --.-KB/s in 0.09s

2021-02-22 01:20:28 (104 MB/s) - 'httpd-2.4.41.tar.gz' saved [9267917/9267917]

user@AA3209-Ubuntu:~$ ls
hl httpd-2.4.41.tar.gz kansiol tmp
```

```

user@AA3209-Ubuntu:~$ mkdir apache
user@AA3209-Ubuntu:~$ mv httpd-2.4.41.tar.gz apache
user@AA3209-Ubuntu:~$ ls
apache hl kansiol tmp
user@AA3209-Ubuntu:~$ cd apache/
user@AA3209-Ubuntu:~/apache$ ls
httpd-2.4.41.tar.gz
user@AA3209-Ubuntu:~/apache$ gzip -d httpd-2.4.41.tar.gz
user@AA3209-Ubuntu:~/apache$ ls
httpd-2.4.41.tar
user@AA3209-Ubuntu:~/apache$ tar -xf httpd-2.4.41.tar
user@AA3209-Ubuntu:~/apache$ ls
httpd-2.4.41 httpd-2.4.41.tar
user@AA3209-Ubuntu:~/apache$ cd httpd-2.4.41/
user@AA3209-Ubuntu:~/apache/httpd-2.4.41$ ls
ABOUT_APACHE      LAYOUT             ROADMAP             configure.in         libhttpd.dsp
Apache-apr2.dsw    LICENSE            VERSIONING          docs                 libhttpd.mak
Apache.dsw          Makefile.in         acinclude.m4        emacs-style          modules
BuildAll.dsp        Makefile.win        ap.d                httpd.dep            os
BuildBin.dsp        NOTICE            apache_probes.d     httpd.dsp            server
CHANGES            NWGNUmakefile       build               httpd.mak            srclib
CMakeLists.txt      README              buildconf           httpd.spec           support
INSTALL             README.cmake        config.layout       include              test
InstallBin.dsp      README.platforms   configure           libhttpd.dep

```

## T5

user@AA3209-Ubuntu: ~/apache/httpd-2.4.41

```

===== This file has been edited in current_date =====
- *- coding: utf-8 -*-
Changes with Apache 2.4.41

*) mod_proxy_balancer: Improve balancer-manager protection against
XSS/XSRF attacks from trusted users. [Joe Orton,
Niels Heinen <heinenn@google.com>]

*) mod_session: Introduce SessionExpiryUpdateInterval which allows to
configure the session/cookie expiry's update interval. PR 57300.
[Paul Spangler <paul.spangler@ni.com>]

*) modules/filters: Fix broken compilation when using old GCC (<4.2.x).
PR 63633. [Rainer Jung, Joe Orton]

*) mod_ssl: Fix startup failure in 2.4.40 with SSLCertificateChainFile
configured for a domain managed by mod_md. [Stefan Eissing]

Changes with Apache 2.4.40

*) core, mod_rewrite: Set PCRE_DOTALL by default. Revert via
RegexDefaultOptions -DOTALL [Yann Ylavic]

2,1 Top

```

```
user@AA3209-Ubuntu:~/apache/httpd-2.4.41$ head -18 CHANGES
===== This file has been edited in 22.02.2021 =====
                                                                -*- coding: utf-8 -*-
Changes with Apache 2.4.41

*) mod_proxy_balancer: Improve balancer-manager protection against
   XSS/XSRF attacks from trusted users.  [Joe Orton,
   Niels Heinen <heinenn@google.com>]

*) mod_session: Introduce SessionExpiryUpdateInterval which allows to
   configure the session/cookie expiry's update interval. PR 57300.
   [Paul Spangler <paul.spangler@ni.com>]

*) modules/filters: Fix broken compilation when using old GCC (<4.2.x).
   PR 63633.  [Rainer Jung, Joe Orton]

*) mod_ssl: Fix startup failure in 2.4.40 with SSLCertificateChainFile
   configured for a domain managed by mod_md.  [Stefan Eissing]

user@AA3209-Ubuntu:~/apache/httpd-2.4.41$
```

## T6

```
user@AA3209-Ubuntu: ~
user@AA3209-Ubuntu:~$ tail /var/log/kern.log
user@AA3209-Ubuntu:~$
user@AA3209-Ubuntu:~$
```

Jostain syystä ei toiminut

## T7

```

user@AA3209-Ubuntu:~$ curl --help
Usage: curl [options...] <url>
    --abstract-unix-socket <path> Connect via abstract Unix domain socket
    --alt-svc <file name> Enable alt-svc with this cache file
    --anyauth          Pick any authentication method
-a, --append          Append to target file when uploading
--basic              Use HTTP Basic Authentication
--cacert <file>      CA certificate to verify peer against
--capath <dir>       CA directory to verify peer against
-E, --cert <certificate[:password]> Client certificate file and password
--cert-status        Verify the status of the server certificate
--cert-type <type>   Certificate file type (DER/PEM/ENG)
--ciphers <list of ciphers> SSL ciphers to use
--compressed         Request compressed response
--compressed-ssh     Enable SSH compression
-K, --config <file>  Read config from a file
--connect-timeout <seconds> Maximum time allowed for connection
--connect-to <HOST1:PORT1:HOST2:PORT2> Connect to host
-C, --continue-at <offset> Resumed transfer offset
-b, --cookie <data|filename> Send cookies from string/file
-c, --cookie-jar <filename> Write cookies to <filename> after operation
--create-dirs        Create necessary local directory hierarchy
--crlf              Convert LF to CRLF in upload
--crlfile <file>     Get a CRL list in PEM format from the given file

```

```

user@AA3209-Ubuntu:~$ cd funet
user@AA3209-Ubuntu:~/funet$ touch funetpage.html
user@AA3209-Ubuntu:~/funet$ ls
funetpage.html
user@AA3209-Ubuntu:~/funet$ curl https://fi.wikipedia.org/wiki/Funet -o funetpag
e.html
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100 36984  100 36984    0     0   222k      0 --:--:-- --:--:-- --:--:--  222k

```

```

user@AA3209-Ubuntu:~/funet$ ls
funetpage.html
user@AA3209-Ubuntu:~/funet$ cat funetpage.html
<!DOCTYPE html>
<html class="client-nojs" lang="fi" dir="ltr">
<head>
<meta charset="UTF-8"/>
<title>Funet - Wikipedia</title>
<script>document.documentElement.className="client-js";RLCONF={"wgBreakFrames":!
1,"wgSeparatorTransformTable":["","\\t.", "\\t,"], "wgDigitTransformTable":["",""], "w
gDefaultDateFormat":"fi normal", "wgMonthNames":["", "tammikuu", "helmikuu", "maalis
kuu", "huhtikuu", "toukokuu", "kesäkuu", "heinäkuu", "elokuu", "syyskuu", "lokakuu", "ma
rraskuu", "joulukuu"], "wgRequestId":"YDKHf2sV3KByB@-dqj3F0wAAABI", "wgCSPNonce":!1
, "wgCanonicalNamespace":"","wgCanonicalSpecialPageName":!1, "wgNamespaceNumber":0
, "wgPageName":"Funet", "wgTitle":"Funet", "wgCurRevisionId":18105385, "wgRevisionId
":18105385, "wgArticleId":340035, "wgIsArticle":!0, "wgIsRedirect":!1, "wgAction":"v
iew", "wgUserName":null, "wgUserGroups":["*"], "wgCategories":["Tietotekniikkatyngä
t", "Internet", "Suomen koulutus"], "wgPageContentLanguage":"fi", "wgPageContentMode
l":"wikitext", "wgRelevantPageName":"Funet", "wgRelevantArticleId":340035, "wgIsPro
bablyEditable":!0, "wgRelevantPageIsProbablyEditable":!0, "wgRestrictionEdit":[], "
wgRestrictionMove":[],
"wgFlaggedRevsParams":{"tags":{"accuracy":{"levels":3, "quality":3, "pristine":4}}
}, "wgStableRevisionId":18105385, "wgMediaViewerOnClick":!0, "wgMediaViewerEnabledB
yDefault":!0, "wgPopupsReferencePreviews":!1, "wgPopupsConflictsWithNavPopupGadget

```

```
user@AA3209-Ubuntu: ~/funet
limit":40},"expensivfunctioncount":{"value":0,"limit":500},"unstrip-depth":{"va
ue":0,"limit":20},"unstrip-size":{"value":3367,"limit":5000000},"entityaccessco
unt":{"value":0,"limit":400},"timingprofile":["100.00% 145.800 1 -total","
82.02% 119.579 1 Malline:Viitteet"," 69.27% 101.001 5 Malline:Verkk
oviite"," 28.41% 41.417 9 Malline:Kotoista_päiväys"," 25.27% 36.837
9 Malline:Onko_päiväys_ISO_8601_-muodossa?"," 16.29% 23.749 5 Malline:I
ETF-kielisympioli"," 5.78% 8.422 1 Malline:Lehtiviite"," 4.66% 6.800
1 Malline:Tynkä/Tietotekniikka"," 3.16% 4.614 1 Malline:K-en","
2.58% 3.768 1 Malline:Tynkämalline"]},"scribunto":{"limitreport-timeusag
e":{"value":"0.045","limit":"10.000"},"limitreport-memusage":{"value":2314789,"l
imit":52428800},"cachereport":{"origin":"mw1326","timestamp":"20210210123327","
ttl":2592000,"transientcontent":false}}});</script>
<script type="application/ld+json">{"@context":"https://schema.org","@type":"A
rticle","name":"Funet","url":"https://fi.wikipedia.org/wiki/Funet","sameAs":
"http://www.wikidata.org/entity/Q4357084","mainEntity":"http://www.wikidat
a.org/entity/Q4357084","author":{"@type":"Organization","name":"Contributors t
o Wikimedia projects"},"publisher":{"@type":"Organization","name":"Wikimedia Fou
ndation, Inc.","logo":{"@type":"ImageObject","url":"https://www.wikimedia.org/
static/images/wmf-hor-googpub.png"},"datePublished":"2007-04-24T11:58:59Z","
dateModified":"2019-04-25T04:50:14Z","image":{"url":"https://upload.wikimedia.org/wi
kipedia/commons/a/a3/FUNET_backbone.svg"}}</script>
<script>(RLQ=window.RLQ||[]).push(function(){mw.config.set({"wgBackendResponseTi
me":210,"wgHostname":"mw1352"});});</script>
</body></html>user@AA3209-Ubuntu:~/funet$
```

T8

B

```
-V, --version          Show version number and quit
-w, --write-out <format> Use output FORMAT after completion
--xattr               Store metadata in extended file attributes
user@AA3209-Ubuntu:~$ curl ftp://speedtest.tele2.net/?
-rw-r--r-- 1 0 0 1073741824000 Feb 19 2016 1000GB.zip
-rw-r--r-- 1 0 0 107374182400 Feb 19 2016 100GB.zip
-rw-r--r-- 1 0 0 102400 Feb 19 2016 100KB.zip
-rw-r--r-- 1 0 0 104857600 Feb 19 2016 100MB.zip
-rw-r--r-- 1 0 0 10737418240 Feb 19 2016 10GB.zip
-rw-r--r-- 1 0 0 10485760 Feb 19 2016 10MB.zip
-rw-r--r-- 1 0 0 1073741824 Feb 19 2016 1GB.zip
-rw-r--r-- 1 0 0 1024 Feb 19 2016 1KB.zip
-rw-r--r-- 1 0 0 1048576 Feb 19 2016 1MB.zip
-rw-r--r-- 1 0 0 209715200 Feb 19 2016 200MB.zip
-rw-r--r-- 1 0 0 20971520 Feb 19 2016 20MB.zip
-rw-r--r-- 1 0 0 2097152 Feb 19 2016 2MB.zip
-rw-r--r-- 1 0 0 3145728 Feb 19 2016 3MB.zip
-rw-r--r-- 1 0 0 524288000 Feb 19 2016 500MB.zip
-rw-r--r-- 1 0 0 53687091200 Jul 24 2014 50GB.zip
-rw-r--r-- 1 0 0 52428800 Feb 19 2016 50MB.zip
-rw-r--r-- 1 0 0 524288 Feb 19 2016 512KB.zip
-rw-r--r-- 1 0 0 5242880 Feb 19 2016 5MB.zip
drwxr-xr-x 2 106 109 81920 Feb 22 01:11 upload
user@AA3209-Ubuntu:~$
```