

UNIX ASSIGNMENT – 1

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SECTION:A

ROLL NO:422127

Write shell scripts for searching for various patterns using

1) HEAD:

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head --help
Usage: head [OPTION]... [FILE]...
Print the first 10 lines of each FILE to standard output.
With more than one FILE, precede each with a header giving the file name.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
  -c, --bytes=[-]NUM      print the first NUM bytes of each file;
                         with the leading '-', print all but the last
                         NUM bytes of each file
  -n, --lines=[-]NUM      print the first NUM lines instead of the first 10;
                         with the leading '-', print all but the last
                         NUM lines of each file
  -q, --quiet, --silent   never print headers giving file names
  -v, --verbose           always print headers giving file names
  -z, --zero-terminated    line delimiter is NUL, not newline
  --help      display this help and exit
  --version   output version information and exit

NUM may have a multiplier suffix:
b 512, kB 1000, K 1024, MB 1000*1000, M 1024*1024,
GB 1000*1000*1000, G 1024*1024*1024, and so on for T, P, E, Z, Y.

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/heads>
or available locally via: info '(coreutils) head invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head --version
head (GNU coreutils) 8.30
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This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat capital.txt
amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head -n 5 state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head -c 10 state.txt
andhrapradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head -q state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head -v state.txt
==> state.txt <==
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ head -z state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
```

2) TAIL:

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail --help
Usage: tail [OPTION]... [FILE]...
Print the last 10 lines of each FILE to standard output.
With more than one FILE, precede each with a header giving the file name.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
      -L      --lines=NUM           output the last NUM lines, or use -c NUM to
```

```
With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
  -c, --bytes=[+]NUM          output the last NUM bytes; or use -c +NUM to
                               output starting with byte NUM of each file
  -f, --follow[={name|descriptor}]
                               output appended data as the file grows;
                               an absent option argument means 'descriptor'
  -F                         same as --follow=name --retry
  -n, --lines=[+]NUM          output the last NUM lines, instead of the last 10;
                               or use -n +NUM to output starting with line NUM
  --max-unchanged-stats=N
                               with --follow=name, reopen a FILE which has not
                               changed size after N (default 5) iterations
                               to see if it has been unlinked or renamed
                               (this is the usual case of rotated log files);
                               with inotify, this option is rarely useful
  --pid=PID                  with -f, terminate after process ID, PID dies
  -q, --quiet, --silent
  --retry                     keep trying to open a file if it is inaccessible
  -s, --sleep-interval=N     with -f, sleep for approximately N seconds
                               (default 1.0) between iterations;
                               with inotify and --pid=P, check process P at
                               least once every N seconds
  -v, --verbose               always output headers giving file names
  -z, --zero-terminated        line delimiter is NUL, not newline
  --help                      display this help and exit
  --version                   output version information and exit
```

```
NUM may have a multiplier suffix:
b 512, kB 1000, K 1024, MB 1000*1000, M 1024*1024,
GB 1000*1000*1000, G 1024*1024*1024, and so on for T, P, E, Z, Y.
```

```
With --follow (-f), tail defaults to following the file descriptor, which
means that even if a tail'ed file is renamed, tail will continue to track
its end. This default behavior is not desirable when you really want to
track the actual name of the file, not the file descriptor (e.g., log
rotation). Use --follow=name in that case. That causes tail to track the
named file in a way that accommodates renaming, removal and creation.
```

```
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/tail>
or available locally via: info '(coreutils) tail invocation'
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail --version
tail (GNU coreutils) 8.30
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://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.

Written by Paul Rubin, David MacKenzie, Ian Lance Taylor,
and Jim Meyering.
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -c 20 state.txt
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -f state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
meghalaya
^C
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -n 5 state.txt
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -q state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -s 20 state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -s 20 state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tail -z state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ █
```

3) CUT:

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut --help
Usage: cut OPTION... [FILE]...
Print selected parts of lines from each FILE to standard output.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
-b, --bytes=LIST      select only these bytes
-c, --characters=LIST select only these characters
-d, --delimiter=DELIM use DELIM instead of TAB for field delimiter
-f, --fields=LIST     select only these fields; also print any line
                      that contains no delimiter character, unless
                      the -s option is specified
-n                  (ignored)
--complement        complement the set of selected bytes, characters
                     or fields
-s, --only-delimited do not print lines not containing delimiters
--output-delimiter=STRING use STRING as the output delimiter
                           the default is to use the input delimiter
-z, --zero-terminated line delimiter is NUL, not newline
--help              display this help and exit
--version           output version information and exit

Use one, and only one of -b, -c or -f. Each LIST is made up of one
range, or many ranges separated by commas. Selected input is written
in the same order that it is read, and is written exactly once.
Each range is one of:

N      N'th byte, character or field, counted from 1
N-    from N'th byte, character or field, to end of line
N-M   from N'th to M'th (included) byte, character or field
-M    from first to M'th (included) byte, character or field

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/cut>
or available locally via: info '(coreutils) cut invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut --version
cut (GNU coreutils) 8.30
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Written by David M. Gay, David MacKenzie, and Jim Meyering.
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -b 5 state.txt
r
n
a
l

r
t
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -c 3 state.txt
d
l
r
m
a
h
h
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -b 1,2,3 state.txt
and
tel
kar
tam
goa
bih
chh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -b 3-7 capital.txt
arava
derab
ngalo
ennai
naji
tna
ipur
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -c 2,3,4 state.txt
ndh
ela
arn
ami
oa
iha
hha
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -d ":" -f 1 state.txt
andhrapradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat state.txt
andhra pradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
arunachal pradesh

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut --complement -d ":" -f 1 state.txt
pradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
pradesh
```

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -d ":" -f 1 state.txt
andhra pradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
arunachal pradesh

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut -d " " -f 1 state.txt
andhra
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
arunachal

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cut complement -c 4-8 state.txt
cut: complement: No such file or directory
hra p
angan
natak
ilnad

ar
attis
nacha

```

4) PASTE:

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste --help
Usage: paste [OPTION]... [FILE]...
Write lines consisting of the sequentially corresponding lines from
each FILE, separated by TABs, to standard output.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
-d, --delimiters=LIST    reuse characters from LIST instead of TABs
-s, --serial           paste one file at a time instead of in parallel
-z, --zero-terminated   line delimiter is NUL, not newline
--help                display this help and exit
--version              output version information and exit

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/paste>
or available locally via: info '(coreutils) paste invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste --version
paste (GNU coreutils) 8.30
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This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by David M. Ihnat and David MacKenzie.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste state.txt capital.txt
andhra prades amaravathi
telangana hyderabad
karnataka bangalore
tamilnadu chennai
goa panaji
bihar patna
chhattisgrah raipur
arunachal pradesh

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste -d "|" state.txt capital.txt
andhra prades|amaravathi
telangana|hyderabad
karnataka|bangalore
tamilnadu|chennai
goa|panaji
bihar|patna
chhattisgrah|raipur
arunachal|pradesh

```

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste -s -d ":" state.txt capital.txt
andhra pradesh:telangana:karnataka:tamilnadu:goa:bihar:chhattisgrah:arunachal pradesh:
amaravathi:hydrabad:bangalore:chennai:panaji:patna:raipur
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ paste -z state.txt capital.txt
andhra pradesh
telangana
karnataka
tamilnadu
goa
bihar
chhattisgrah
arunachal pradesh

amaravathi
hydrabad
bangalore
chennai
panaji
patna
raipur

```

5) SORT:

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort --help
Usage: sort [OPTION]... [FILE]...
      or: sort [OPTION]... --files0-from=F
Write sorted concatenation of all FILE(s) to standard output.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
Ordering options:

-b, --ignore-leading-blanks  ignore leading blanks
-d, --dictionary-order        consider only blanks and alphanumeric characters
-f, --ignore-case             fold lower case to upper case characters
-g, --general-numeric-sort   compare according to general numerical value
-i, --ignore-nonprinting      consider only printable characters
-M, --month-sort              compare (unknown) < 'JAN' < ... < 'DEC'
-h, --human-numeric-sort     compare human readable numbers (e.g., 2K 1G)
-n, --numeric-sort            compare according to string numerical value
-R, --random-sort             shuffle, but group identical keys. See shuf(1)
--random-source=FILE          get random bytes from FILE
-r, --reverse                 reverse the result of comparisons
--sort=WORD                   sort according to WORD:
                               general-numeric -g, human-numeric -h, month -M,
                               numeric -n, random -R, version -V
-V, --version-sort            natural sort of (version) numbers within text

Other options:

--batch-size=NMERGE    merge at most NMERGE inputs at once;
                      for more use temp files
-c, --check, --check=diagnose-first check for sorted input; do not sort
-C, --check=quiet, --check=silent like -c, but do not report first bad line
--compress-program=PROG compress temporaries with PROG;
                           decompress them with PROG -d
--debug                  annotate the part of the line used to sort,
                           and warn about questionable usage to stderr
--files0-from=F           read input from the files specified by
                           NUL-terminated names in file F;
                           If F is - then read names from standard input
-k, --key=KEYDEF          sort via a key; KEYDEF gives location and type
-m, --merge                merge already sorted files; do not sort
-o, --output=FILE          write result to FILE instead of standard output
-s, --stable               stabilize sort by disabling last-resort comparison
--buffer-size=SIZE         use SIZE for extra memory buffers

```

```
-m, --merge          merge already sorted files; do not sort
-o, --output=FILE   write result to FILE instead of standard output
-s, --stable         stabilize sort by disabling last-resort comparison
-S, --buffer-size=SIZE use SIZE for main memory buffer
-t, --field-separator=SEP use SEP instead of non-blank to blank transition
-T, --temporary-directory=DIR use DIR for temporaries, not $TMPDIR or /tmp;
                               multiple options specify multiple directories
--parallel=N         change the number of sorts run concurrently to N
-u, --unique         with -c, check for strict ordering;
                               without -c, output only the first of an equal run
-z, --zero-terminated line delimiter is NUL, not newline
--help      display this help and exit
--version  output version information and exit
```

KEYDEF is F[.C][OPTS][,F[.C][OPTS]] for start and stop position, where F is a field number and C a character position in the field; both are origin 1, and the stop position defaults to the line's end. If neither -t nor -b is in effect, characters in a field are counted from the beginning of the preceding whitespace. OPTS is one or more single-letter ordering options [bdfgiMhnRrV], which override global ordering options for that key. If no key is given, use the entire line as the key. Use --debug to diagnose incorrect key usage.

SIZE may be followed by the following multiplicative suffixes:
% 1% of memory, b 1, K 1024 (default), and so on for M, G, T, P, E, Z, Y.

*** WARNING ***
The locale specified by the environment affects sort order.
Set LC_ALL=C to get the traditional sort order that uses native byte values.

```
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/sort>
or available locally via: info '(coreutils) sort invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort --version
sort (GNU coreutils) 8.30
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There is NO WARRANTY, to the extent permitted by law.
```

Written by Mike Haertel and Paul Eggert.

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -b state.txt capital.txt
amaravathi
andhra pradesh
arunachal pradesh
bangalore
bihar
chennai
chhattisgrah
goa
hyderabad
karnataka
panaji
patna
raipur
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -d snumber.txt
14
2
2
3
3
5
5
7
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -f snumber.txt
14
2
2
3
3
3
r
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -f snumber.txt
14
2
2
3
3
5
5
7
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -f state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -g snumber.txt
2
2
3
3
5
5
7
14
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -i state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat month.txt
january
march
december
february
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -M month.txt
january
february
march
december
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -M state.txt

andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -h snumber.txt
2
2
3
3
5
5
7
14
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -r state.txt
telangana
tamilnadu
karnataka
goa
chhattisgrah
bihar
arunachal pradesh
andhra pradesh
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -R state.txt
bihar
telangana
goa
tamilnadu

arunachal pradesh
karnataka
andhra pradesh
chhattisgrah
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -n snumber.txt
2
2
3
3
5
5
7
14
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -nr snumber.txt
14
7
5
5
3
3
2
2
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat matrix.txt
1 23 22 45
11 33 66 22
7 8 6 5
9 8 4 3
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -n -k1 matrix.txt
1 23 22 45
7 8 6 5
9 8 4 3
11 33 66 22
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -n -k1 matrix.txt
1 23 22 45
7 8 6 5
9 8 4 3
11 33 66 22
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -n -k2 matrix.txt
7 8 6 5
9 8 4 3
1 23 22 45
11 33 66 22
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -k1 matrix.txt
11 33 66 22
1 23 22 45
7 8 6 5
9 8 4 3
```

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -n -k2 matrix.txt
7 8 6 5
9 8 4 3
1 23 22 45
11 33 66 22
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -k1 matrix.txt
11 33 66 22
1 23 22 45
7 8 6 5
9 8 4 3
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ touch output.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -o output.txt capital.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat capital.txt
amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ sort -u state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana

```

6) UNIQ:

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq --help
Usage: uniq [OPTION]... [INPUT [OUTPUT]]
Filter adjacent matching lines from INPUT (or standard input),
writing to OUTPUT (or standard output).

With no options, matching lines are merged to the first occurrence.

Mandatory arguments to long options are mandatory for short options too.
-c, --count           prefix lines by the number of occurrences
-d, --repeated        only print duplicate lines, one for each group
-D                   print all duplicate lines
--all-repeated[=METHOD] like -D, but allow separating groups
                     with an empty line;
                     METHOD={none(default),prepend,separate}
-f, --skip-fields=N  avoid comparing the first N fields
--group[=METHOD]       show all items, separating groups with an empty line;
                     METHOD={separate(default),prepend,append,both}
-i, --ignore-case     ignore differences in case when comparing
-s, --skip-chars=N    avoid comparing the first N characters
-u, --unique          only print unique lines
-z, --zero-terminated line delimiter is NUL, not newline
-w, --check-chars=N   compare no more than N characters in lines
--help                display this help and exit
--version             output version information and exit

A field is a run of blanks (usually spaces and/or TABs), then non-blank
characters. Fields are skipped before chars.

Note: 'uniq' does not detect repeated lines unless they are adjacent.
You may want to sort the input first, or use 'sort -u' without 'uniq'.
Also, comparisons honor the rules specified by 'LC_COLLATE'.

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/uniq>
or available locally via: info '(coreutils) uniq invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq --version
uniq (GNU coreutils) 8.30
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://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.

Written by Richard M. Stallman and David MacKenzie.

```

```
Written by Richard M. Stallman and David MacKenzie.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -c state.txt
    4 andhra pradesh
    1 arunachal pradesh
    1 bihar
    2 chhattisgrah
    1 goa
    2 karnataka
    1 tamilnadu
    3 telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq d state.txt
uniq: d: No such file or directory
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -d state.txt
andhra pradesh
chhattisgrah
karnataka
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -u state.txt
arunachal pradesh
bihar
goa
tamilnadu
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -f 1 state.txt
andhra pradesh
bihar
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -i state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -d state.txt
andhra pradesh
chhattisgrah
karnataka
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -u state.txt
arunachal pradesh
bihar
goa
tamilnadu
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -f 1 state.txt
andhra pradesh
bihar
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -i state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -s 12 state.txt
andhra pradesh
arunachal pradesh
bihar
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ uniq -w 2 state.txt
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
goa
karnataka
tamilnadu
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$
```

7)TR:

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tr --help
Usage: tr [OPTION]... SET1 [SET2]
Translate, squeeze, and/or delete characters from standard input,
writing to standard output.

-c, -C, --complement    use the complement of SET1
-d, --delete            delete characters in SET1, do not translate
-s, --squeeze-repeats   replace each sequence of a repeated character
                        that is listed in the last specified SET,
                        with a single occurrence of that character
-t, --truncate-set1     first truncate SET1 to length of SET2
--help                  display this help and exit
--version               output version information and exit

SETs are specified as strings of characters. Most represent themselves.
Interpreted sequences are:

\NNN      character with octal value NNN (1 to 3 octal digits)
\\        backslash
\b        audible BEL
\b        backspace
\f        form feed
\n        new line
\r        return
\t        horizontal tab
\v        vertical tab
CHAR1-CHAR2  all characters from CHAR1 to CHAR2 in ascending order
[CHAR*]      in SET2, copies of CHAR until length of SET1
[CHAR*REPEAT] REPEAT copies of CHAR, REPEAT octal if starting with 0
[:alnum:]    all letters and digits
[:alpha:]    all letters
[:blank:]   all horizontal whitespace
[:cntrl:]   all control characters
[:digit:]   all digits
[:graph:]   all printable characters, not including space
[:lower:]   all lower case letters
[:print:]   all printable characters, including space
[:punct:]   all punctuation characters
[:space:]   all horizontal or vertical whitespace
[:upper:]   all upper case letters
[:xdigit:]  all hexadecimal digits
[=CHAR=]    all characters which are equivalent to CHAR

Translation occurs if -d is not given and both SET1 and SET2 appear.
-t may be used only when translating. SET2 is extended to length of
SET1 by repeating its last character as necessary. Excess characters
```

```
Translation occurs if -d is not given and both SET1 and SET2 appear.  
-t may be used only when translating. SET2 is extended to length of  
SET1 by repeating its last character as necessary. Excess characters  
of SET2 are ignored. Only [:lower:] and [:upper:] are guaranteed to  
expand in ascending order; used in SET2 while translating, they may  
only be used in pairs to specify case conversion. -s uses the last  
specified SET, and occurs after translation or deletion.
```

```
GNU coreutils online help: <https://www.gnu.org/software/coreutils/>  
Full documentation at: <https://www.gnu.org/software/coreutils/tr>  
or available locally via: info '(coreutils) tr invocation'  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ tr --version  
tr (GNU coreutils) 8.30  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <https://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.
```

Written by Jim Meyering.

```
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat state.txt | tr [a-z] [A-Z]
```

```
ANDHRA PRADESH  
ANDHRA PRADESH  
ANDHRA PRADESH  
ANDHRA PRADESH  
ARUNACHAL PRADESH  
BIHAR  
CHHATTISGRAH  
CHHATTISGRAH  
GOA  
KARNATAKA  
KARNATAKA  
TAMILNADU  
TELANGANA  
TELANGANA  
TELANGANA
```

```
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "hi thi i unix aignment" | tr -d s  
hi thi i unix aignment  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 422127" | tr -d [:digit:]  
my id is  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:alnum:]  
  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:alpha:]  
142563  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:blank:]  
myidis142563
```

```
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:blank:]  
myldis142563  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:cntrl:]  
my id is 142563@student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:graph:]  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:lower:]  
142563  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:print:]  
  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563!!!" | tr -d [:punct:]  
echo "my id is 142563echo "my id is 142563" | tr -d [:print:]!" | tr -d [:punct:]  
my id is 142563echo my id is 142563 tr d print  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my id is 142563" | tr -d [:print:]  
  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ cat state.txt | tr -d [:space:]  
andhrapradeshandhrapradeshandhrapradeshandhrapradeshandhrapradeshandhrapradesh  
anastudent@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "ny ID ts 142563" | tr -d [:upper:]  
my is 142563  
student@al-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ echo "my ID is 142563" | tr -d [:lower:]  
ID 142563
```

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "ppppppaaaaavvvviiiiittthhhrrrraaa" | tr -s p,a,v,i,t,h,r,a
pavithra
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavithra pavithra" | tr -t 1 2
pavithra pavithra
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavithra pavithra" | tr -t 20 1
pavithra pavithra
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavi hi how are you?" | tr -t hi,hey
tr: missing operand after 'hi,hey'
Two strings must be given when translating.
Try 'tr --help' for more information.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavi hi how are you?" | tr -t hi,pa
tr: missing operand after 'hi,pa'
Two strings must be given when translating.
Try 'tr --help' for more information.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavi hi how are you?" | tr -t pavi,hi
tr: missing operand after 'pavi,hi'
Two strings must be given when translating.
Try 'tr --help' for more information.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavi hi how are you?" | tr -t pavi,hi
tr: missing operand after 'pavi,hi'
Two strings must be given when translating.
Try 'tr --help' for more information.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ echo "pavi hi how are you?" | tr -t pav, hi
hihi hi how are you?
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ 

```

8) GREP:

```

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422i27_unixlab$ grep --help
Usage: grep [OPTION]... PATTERN [FILE]...
Search for PATTERNs in each FILE.
Example: grep -i 'hello world' menu.h main.c
PATTERNS can contain multiple patterns separated by newlines.

Pattern selection and interpretation:
-E, --extended-regexp      PATTERNS are extended regular expressions
-F, --fixed-strings        PATTERNS are strings
-G, --basic-regexp         PATTERNS are basic regular expressions
-P, --perl-regexp          PATTERNS are Perl regular expressions
-e, --regexp=PATTERNS     use PATTERNs for matching
-f, --file=FILE             take PATTERNs from FILE
-i, --ignore-case          ignore case distinctions in patterns and data
--no-ignore-case           do not ignore case distinctions (default)
-w, --word-regexp          match only whole words
-x, --line-regexp           match only whole lines
-z, --null-data            a data line ends in 0 byte, not newline

Miscellaneous:
-s, --no-messages          suppress error messages
-v, --invert-match          select non-matching lines
-V, --version                display version information and exit
--help                      display this help text and exit

Output control:
-m, --max-count=NUM        stop after NUM selected lines
-b, --byte-offset            print the byte offset with output lines
-n, --line-number            print line number with output lines
--line-buffered              flush output on every line
-H, --with-filename          print file name with output lines
-h, --no-filename            suppress the file name prefix on output
--label=LABEL                use LABEL as the standard input file name prefix
-o, --only-matching          show only nonempty parts of lines that match
-q, --quiet, --silent        suppress all normal output
--binary-files=TYPE          assume that binary files are TYPE;
                             TYPE is 'binary', 'text', or 'without-match'
-a, --text                   equivalent to --binary-files=text
-I                          equivalent to --binary-files=without-match
-d, --directories=ACTION    how to handle directories;
                           ACTION is 'read', 'recurse', or 'skip'
-D, --devices=ACTION         how to handle devices, FIFOs and sockets;
                           ACTION is 'read' or 'skip'
--color[=WHEN]               colorize output; WHEN is 'always', 'auto', or 'never'


```

```
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422...      student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422...      student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422...
--binary-files=TYPE    assume that binary files are TYPE;
                      TYPE is 'binary', 'text', or 'without-match'
-a, --text            equivalent to --binary-files=text
-I                  equivalent to --binary-files=without-match
-d, --directories=ACTION how to handle directories;
                      ACTION is 'read', 'reurse', or 'skip'
-D, --devices=ACTION  how to handle devices, FIFOs and sockets;
                      ACTION is 'read' or 'skip'
-r, --recursive       like --directories=recurse
-R, --dereference-recursive likewise, but follow all symlinks
--include=GLOB        search only files that match GLOB (a file pattern)
--exclude=GLOB        skip files that match GLOB
--exclude-from=FILE   skip files that match any file pattern from FILE
--exclude-dir=GLOB    skip directories that match GLOB
-L, --files-without-match print only names of FILES with no selected lines
-l, --files-with-matches print only names of FILES with selected lines
-c, --count           print only a count of selected lines per FILE
-T, --initial-tab    make tabs line up (if needed)
-Z, --null            print 0 byte after FILE name

Context control:
-B, --before-context=NUM  print NUM lines of leading context
-A, --after-context=NUM   print NUM lines of trailing context
-C, --context=NUM         print NUM lines of output context
-NUM                      same as --context=NUM
--color[=:WHEN],          use markers to highlight the matching strings;
--colour[=:WHEN]          WHEN is 'always', 'never', or 'auto'
-U, --binary             do not strip CR characters at EOL (MSDOS/Windows)

When FILE is '-', read standard input. With no FILE, read '.' if
recursive, '--' otherwise. With fewer than two FILES, assume -h.
Exit status is 0 if any line (or file if -L) is selected, 1 otherwise;
if any error occurs and -q is not given, the exit status is 2.

Report bugs to: bug-grep@gnu.org
GNU grep home page: <http://www.gnu.org/software/grep/>
General help using GNU software: <https://www.gnu.org/gethelp/>
student@ai-HP-ProDesk-600-G4-MT: ~/Desktop/422127_unixlab$ grep --version
grep (GNU grep) 3.4
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://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.
```

```
Report bugs to: bug-grep@gnu.org
GNU grep home page: <http://www.gnu.org/software/grep/>
General help using GNU software: <https://www.gnu.org/gethelp/>
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep --version
grep (GNU grep) 3.4
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://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.

Written by Mike Haertel and others; see
<https://git.sv.gnu.org/cgit/grep.git/tree/AUTHORS>.
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -i "andhra" state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -i "pradesh" state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
arunachal pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -c "andhra" state.txt
4
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -c "goa" state.txt
1
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -w "andhra" state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -i "andh" state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -w "andh" state.txt
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -0 "karnataka" state.txt
karnataka
karnataka
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -n "karnataka" state.txt
10:karnataka
*** Truncated ***
```

```
karnataka
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -n "karnataka" state.txt
10:karnataka
11:karnataka
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -n "andhra" state.txt
1:andhra pradesh
2:andhra pradesh
3:andhra pradesh
4:andhra pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ grep -n "pradesh" state.txt
1:andhra pradesh
2:andhra pradesh
3:andhra pradesh
4:andhra pradesh
5:arunachal pradesh
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ []
```

9) PR:

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr --help
Usage: pr [OPTION]... [FILE]...
Paginate or columnate FILE(s) for printing.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.
+FIRST_PAGE[:LAST_PAGE], --pages=FIRST_PAGE[:LAST_PAGE]
    begin [stop] printing with page FIRST_[LAST_]PAGE
-COLUMN, --columns=COLUMN
    output COLUMN columns and print columns down,
    unless -a is used. Balance number of lines in the
    columns on each page
-a, --across      print columns across rather than down, used together
    with -COLUMN
-c, --show-control-chars
    use hat notation (^G) and octal backslash notation
-d, --double-space
    double space the output
-D, --date-format=FORMAT
    use FORMAT for the header date
-e[CHAR[WIDTH]], --expand-tabs[=CHAR[WIDTH]]
    expand input CHARs (TABs) to tab WIDTH (8)
-F, -f, --form-feed
    use form feeds instead of newlines to separate pages
    (by a 3-line page header with -F or a 5-line header
    and trailer without -F)
-h, --header=HEADER
    use a centered HEADER instead of filename in page header,
    -h "" prints a blank line, don't use -h ""
-i[CHAR[WIDTH]], --output-tabs[=CHAR[WIDTH]]
    replace spaces with CHARs (TABs) to tab WIDTH (8)
-J, --join-lines
    merge full lines, turns off -W line truncation, no column
    alignment, --sep-string[=STRING] sets separators
-l, --length=PAGE_LENGTH
    set the page length to PAGE_LENGTH (66) lines
    (default number of lines of text 56, and with -F 63).
    implies -t if PAGE_LENGTH <= 10
-m, --merge
    print all files in parallel, one in each column,
    truncate lines, but join lines of full length with -J
-n[SEP[DIGITS]], --number-lines[=SEP[DIGITS]]
    number lines, use DIGITS (5) digits, then SEP (TAB),
    default counting starts with 1st line of input file
-N, --float-number=NUMBER
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr --help
page printed (see +FIRST_PAGE)
-o, --indent=WIDTH
        offset each line with WIDTH (zero) spaces, do not
        affect -w or -W, WIDTH will be added to PAGE_WIDTH
-r, --no-file-warnings
        omit warning when a file cannot be opened
-s[CHAR], --separator[=CHAR]
        separate columns by a single character, default for CHAR
        is the <TAB> character without -w and 'no char' with -w.
        -s[CHAR] turns off line truncation of all 3 column
        options (-COLUMN|-a -COLUMN|-m) except -w is set
-S[STRING], --sep-string[=STRING]
        separate columns by STRING,
        without -S: Default separator <TAB> with -J and <space>
        otherwise (same as -S " "), no effect on column options
-t, --omit-header
        omit page headers and trailers;
        implied if PAGE_LENGTH <= 10
-T, --omit-pagination
        omit page headers and trailers, eliminate any pagination
        by form feeds set in input files
-v, --show-nonprinting
        use octal backslash notation
-w, --width=WIDTH
        set page width to WIDTH (72) characters for
        multiple text-column output only, -s[char] turns off (72)
-W, --page-width=WIDTH
        set page width to WIDTH (72) characters always,
        truncate lines, except -J option is set, no interference
        with -S or -s
--help    display this help and exit
--version output version information and exit

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation at: <https://www.gnu.org/software/coreutils/pr>
or available locally via: info '(coreutils) pr invocation'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr --version
pr (GNU coreutils) 8.30
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://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.

Written by Pete TerMaat and Roland Huebner.
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr capital.txt

2024-01-19 11:09           capital.txt          Page 1

amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t capital.txt
amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -d capital.txt
```

```
2024-01-19 11:09           capital.txt          Page 1
```

```
amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -a capital.txt
```

```
2024-01-19 11:09           capital.txt          Page 1
```

```
amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -D capital.txt
14/02/2024

capital.txt                                Page 1

14/02/2024
telagana
telagana
^C
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -f capital.txt

2024-01-19 11:09          capital.txt          Page 1

amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -3 -f capital.txt

2024-01-19 11:09          capital.txt          Page 1

amaravathi      chennai      patna
hyderabad      panaji       ralpur
bangalore

student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -h capital.txt
amaravati
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -h capital.txt
amaravati

2024-02-14 16:23          capital.txt          Page 1

amaravati
^C
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -i capital.txt

2024-01-19 11:09          capital.txt          Page 1

amaravathi
hyderabad
bangalore
chennai
panaji
patna
raipur
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -m capital.txt state.txt
```

2024-02-14 16:24

Page 1

amaravathi	andhra pradesh
hyderabad	andhra pradesh
bangalore	andhra pradesh
chennai	andhra pradesh
panaji	arunachal pradesh
patna	bihar
raipur	chhattisgrah
	chhattisgrah
	goa
	karnataka
	karnataka
	tamilnadu
	telangana
	telangana
	telangana

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -n -3 -t state.txt
```

1	andhra pradesh	6	bihar	11	karnataka
2	andhra pradesh	7	chhattisgrah	12	tamilnadu
3	andhra pradesh	8	chhattisgrah	13	telangana
4	andhra pradesh	9	goa	14	telangana
5	arunachal prade	10	karnataka	15	telangana

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -T state.txt
```

andhra pradesh
andhra prades
andhra prades
andhra prades
arunachal prades
bihar
chhattisgrah
chhattisgrah
goa
karnataka
karnataka
tamilnadu
telangana
telangana
telangana

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -v state.txt
```

2024-02-14 15:52

state.txt

Page 1

andhra prades
andhra prades
andhra prades
andhra prades
arunachal prades
bihar
chhattisgrah
chhattisgrah
goa
karnataka
karnataka
tamilnadu
telangana
telangana

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -w 2 state.txt

2024-02-14 15:52 state.txt Page 1

andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
chhattisgrah
goa
karnataka
karnataka
tamilnadu
telangana
telangana
telangana
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t -w 4 state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
chhattisgrah
goa
karnataka
karnataka
tamilnadu
telangana
telangana
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t -W state.txt
pr: '-W PAGE_WIDTH' invalid number of characters: 'state.txt'
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t -W 20 state.txt
andhra pradesh
andhra pradesh
andhra pradesh
andhra pradesh
arunachal pradesh
bihar
chhattisgrah
chhattisgrah
goa
karnataka
karnataka
tamilnadu
telangana
telangana
telangana
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t -W 2 state.txt
an
an
an
```

```
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ pr -t -W 2 state.txt
an
an
an
an
ar
bi
ch
ch
go
ka
ka
ta
te
te
te
student@ai-HP-ProDesk-600-G4-MT:~/Desktop/422127_unixlab$ □
```