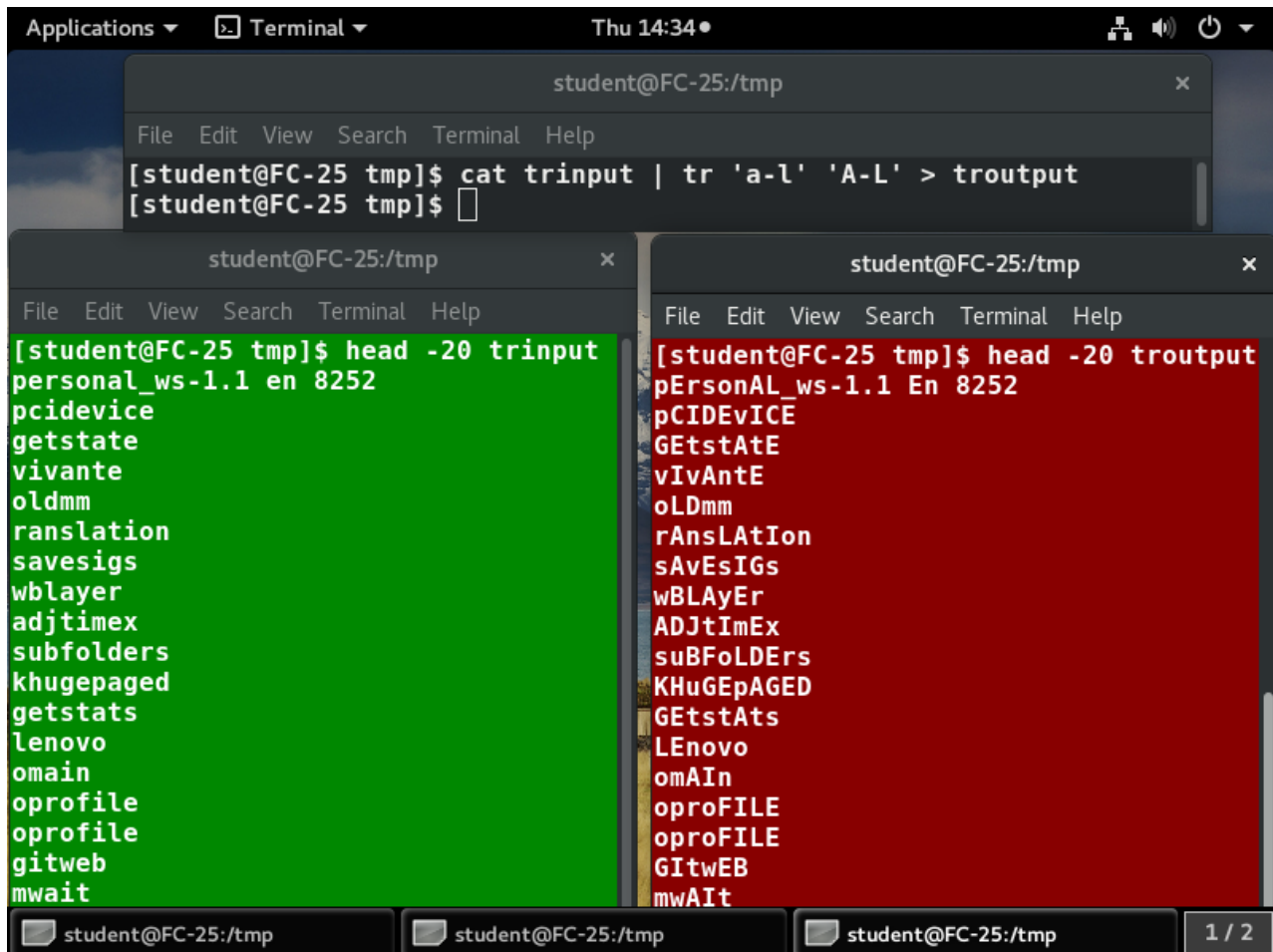


tr

coursera.org/learn/linux-tools-for-developers/supplement/HeAxy/tr

Now, we will discuss some additional text utilities that you can use for performing various actions on your Linux files, such as changing the case of letters or determining the count of words, lines, and characters in a file.



```
student@FC-25:/tmp
[student@FC-25 tmp]$ cat trinput | tr 'a-l' 'A-L' > troutput
[student@FC-25 tmp]$

student@FC-25:/tmp
[student@FC-25 tmp]$ head -20 trinput
personal_ws-1.1 en 8252
pcidevice
getstate
vivante
oldmm
ranslation
savesigs
wblayer
adjtimex
subfolders
khugepaged
getstats
lenovo
omain
oprofile
oprofile
gitweb
mwait

student@FC-25:/tmp
[student@FC-25 tmp]$ head -20 troutput
pERsonAL_ws-1.1 En 8252
pCIDeVICe
GEtstAtE
vIVAntE
oLDmm
rAnSLAtIon
sAvEsIGs
wBLAYEr
ADJtImEx
suBFoLDers
KHuGEpAGED
GEtstAts
LEnovo
omAIn
oproFILE
oproFILE
GITwEB
mWAIt
```

The **tr** utility is used to translate specified characters into other characters or to delete them. The general syntax is as follows:

```
$ tr [options] set1 [set2]
```

The items in the square brackets are optional. **tr** requires at least one argument and accepts a maximum of two. The first designated **set1** in the example lists the characters in the text to be replaced or removed. The second, **set2**, lists the characters that are to be substituted for the characters listed in the first argument. Sometimes, these sets need to be surrounded by apostrophes (or single-quotes (')) in order to have the shell ignore that they mean something special to the shell. It is usually safe (and may be required) to use the single-quotes around each of the sets, as you will see in the examples below.

For example, suppose you have a file named **city** containing several lines of text in mixed case. To translate all lower case characters to upper case, at the command prompt type **cat city | tr a-z A-Z** and press the **Enter** key.

Command	Usage
\$ tr abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ	Convert lower case to upper case
\$ tr '{}' '()' < inputfile > outputfile	Translate braces into parenthesis
\$ echo "This is for testing" tr [:space:] '\t'	Translate white-space to tabs
\$ echo "This is for testing" tr -s [:space:]	Squeeze repetition of characters using -s
\$ echo "the geek stuff" tr -d 't'	Delete specified characters using -d option
\$ echo "my username is 432234" tr -cd [:digit:]	Complement the sets using -c option
\$ tr -cd [:print:] < file.txt	Remove all non-printable characters from a file
\$ tr -s '\n' ' ' < file.txt	Join all the lines in a file into a single line