PHYS 3340
Spring 2009
TE Coan

How to package homework files

Your homework typically requires you to create various files, e.g., source files and plots. You need to collect these files and package them into one **single** file and then mail that single file to me (or the TA). The linux command to perform this file packaging is *tar,* for "tape archive." The command's name is a bit archaic but its functionality is not.

Suppose you have the files: source1.cc, source2.cc and plot1.pdf. To create the tarfile (e.g., *coan_hw15.tar*) that will contain source1.cc, source2.cc and plot1.pdf, issue the command:

<div align="center">

tar cvf coan_hw15.tar source1.cc source2.cc plot1.pdf

</div>

The switches are *c* ("create"), *v* ("verbose," tell me everything the command is doing) and *f* ("file," the name of the tarfile comes next). If you forget to add a file to your existing tarfile, you can append it. For example, to append the file *source4.cc* to *coan_hw15.tar*, issue the command

<div align="center">

tar rvf coan_hw15.tar source4.cc

</div>

I have no idea why *r* is the switch name for the append operation, but it is. To list the contents of a tarfile, execute the *tar* command with the *t* ("list") switch:

<div align="center">

tar tvf coan_hw15.tar

</div>

To unpack a tarfile, that is, extract the files from the tarfile and place them in the same directory as where the tarfile is living, use the *x* switch "extract":

<div align="center">

tar xvf coan_hw15.tar

</div>

The tar command has many options, including compression. Read the man pages.