

Modifying Programs

Week 3



Laboratory

Getting Set up

- Download coreutils-7.6 to your home directory
- Download the patch to your home directory
- Untar and Unzip it
 - `tar -xvf coreutils-7.6.tar.gz`
- Make a directory coreutilsInstall in your home directory (this is where you'll be installing coreutils)

Compiling

- Go into coreutils-7.6 directory. This is what you just unzipped.
- Read the INSTALL file on how to configure “make,” particularly the --prefix flag.
- Run the configure script so that when everything is done, coreutils will be installed in the directory ~/coreutilsInstall
- Compile it: make
- Install it: make install

Applying the Patch

- Use the link provided
- Copy the patch code to a text editor, VIM or EMACS, and save it, name doesn't matter
- Move patch code to the coreutils directory
- Use “`patch -p1 -fuzz=5 < patchfilename`”
- Recompile it: `make`



Homework

Running Python scripts

- Make sure it has executable permission:

```
chmod +x randline.py
```

- Run it

```
./randline.py -n 2 filename
```

n: is an option indicating the number of lines to write

2: is an argument to n (you can use any number)

Filename: is a program argument

Use `./randline.py -h` for full usage options

Python Tuples and Lists

- `months = ('January','February','March','April','May','June','July','August','September','October','November',' December')`
- `months[1] = February`
- `cats = ['Tom', 'Snappy', 'Kitty', 'Jessie', 'Chester']`
- `cats.append('Catherine')`
- `del cats[1]`

Python Dictionaries

- `phonebook = {'Andrew Parson':8806336, 'Emily Everett':6784346, 'Peter Power':7658344, 'Lewis Lame':1122345}`
- `phonebook.has_key('Andrew Parson')`
- `del phonebook['Andrew Parson']`
- `phonebook['New Guy'] = 111111`
- `names = phonebook.keys()`
- `numbers = phonebook.values()`
- More info
<http://docs.python.org/tutorial/datastructures.html>