# Homework #4

- On Unix-like computers there exists a very useful program called ‘grep’. This program permits searching a text file for any lines containing a specific substring, printing the matching lines on the display. It has a variety of different options for modifying this behavior. For this homework, you need to write a functional version of the grep command (executed from the command-line) accepting a single option. The command should be run like this:

  mygrep.py [-i] <string> <file1> [file2] [file3] ...

  If you have difficulty getting it to execute directly, it is acceptable to require:

  python mygrep.py [-i] <string> <file1> [file2] [file3] ...

  In standard command-line documentation, items inside ‘< >’ are required parameters, and items inside ‘[ ]’ are optional parameters. If one filename is specified, the program should simply print any lines containing ‘<string>’ and exit. If multiple files are specified, then <file1>: would be printed, followed by matching lines, then <file2>:, and the matching lines from file2, etc. If ‘-i’ is specified, then the string search should be case-insensitive, eg - grep -i for ‘george’ would return lines like ‘his name was George’.

  To test your program, download:

  ftp://ftp.wwpdb.org/pub/pdb/derived_data/index/compound.idx then

  mygrep.py -i mm-cpn compound.idx

  You should get 11 matching lines. Turn in your mygrep.py program by email.