Write a python script called hoster-toaster.py that is used to update a machine's local hostname resolution file.  The details of how it works are below:

1. It requires one argument on the command line:  the absolute path to a file it will read data from.  
2. It will use the information in that file to alter the machine's /etc/hosts file.  
3. If it is run with no other options, it will overwrite the contents or /etc/hosts using the new data in the file provided as the argument  
4. If it is run with the option -<OPTION 1 - RANDOMLY CHOSEN> it will add the data from the provided file to whatever is currently in /etc/hosts.  You may assume any ip address that is already in /etc/hosts will not be in the provided file.  
5. Bonus: Up to 10% marks - implement a second option -<OPTION 2 - RANDOMLY CHOSEN>.  Note: This option can not be used in the same run of the command as -<OPTION 1>.  If this option is used, an ip address that is already in /etc/hosts can appear in the provided file.  If that happens, the data in the provided file replaces whatever was in /etc/hosts.  I.e. the old hostname(s) associated with the address get overwritten by the hostname(s) in the provided file.  
6. Bonus: Up to 10% marks - implement a third option -<OPTION 3 - RANDOMLY CHOSEN>.  Note: This option can not be used in the same run of the command as either -<OPTION 1> or -<OPTION 2>.  If this option is used, an ip address that is already in /etc/hosts can appear in the provided file.  If that happens, the data in the provided file is added to whatever was already in /etc/hosts.  I.e. the hostnames in the provided file are added to the hostname(s) already in /etc/hosts, in alphabetical order.

Note that regardless of the options used, the ipv4 and ipv6 localhost addresses in /etc/hosts must not be altered.

Note that if any issues are encountered while accessing either of /etc/hosts or the file provided by the user, your script must handle them gracefully.  Giving an error message and exiting is permissable, crashing is not.

Note that you must make use of python's file editing capabilities.  Simply re-directing output from a command into the file will not be accepted.

The format for the provided file will always be:  One address entry per line.  Consisting of a valid ipv4 address, a :, and a comma-separated list of hostnames that correspond to that address.  You may assume that the ipv4 address is valid, and that the list of hostnames that accompany it are already in alphabetical order.