



Python Training.....

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Agenda

- Opening file
- Reading, Writing & Seeking
- Path manipulation functions



FILE

- `handle = open(<name of file>, <mode in which to open>)`
 - Mode can be :
 - “r” – read
 - “w” – write
 - “a” – append
 - “b” - binary files
 - Add '+' to the mode to allow simultaneous reading & writing
- API's :- `close`, `fileno`, `flush`, `isatty`, `next`, `read([size])`, `readline`, `readlines`, `seek(offset[,whence (1 – current, 2 – end, 0 – beginning)])`, `tell`, `truncate`, `write`, `writelines`
- Data descriptors:- `closed`, `mode`, `name`
- In 3.x onwards open file in “b” mode as well for seeking from current position or end



Assignments

1. Write a function `input_stats` that accepts a file name as a parameter and that reports the longest line in the file.
2. Write code to read a file of petrol prices in Maharashtra, Goa & Karnataka:

Jan 2015 81 67 84

Feb 2015 79 66 82

Mar 2015 78 65 81

Apr 2015 77 64 80

...

Output the average petrol price for each state to an output file named `petrol_avg_out.txt`.

3. Read alternate 10-10 characters of file
4. Write a program to parse config file.



os.path – Path Manipulation

- os.path – for path manipulations
 - abspath – converts to absolute path
 - basename – last component name
 - commonprefix
 - dirname
 - exists
 - expandvars
 - getatime, getctime, getmtime, getsize
 - isabs, isdir, isfile, islink - symbolic, ismount
 - join
 - normcase (for windows)
 - normpath (//)
 - realpath : canonical path of the specified filename, eliminating any symbolic links
 - samefile – True if 2 pathnames reference the same actual file
 - split – returns tuple (head, tail)
 - splitext
 - walk : directory tree walk with callback function



Other File Handling Modules

- `fileinput`
- `stat`
- `filecmp`
- `shutil`
- `tempfile`