

Reading and Writing to Files on Python

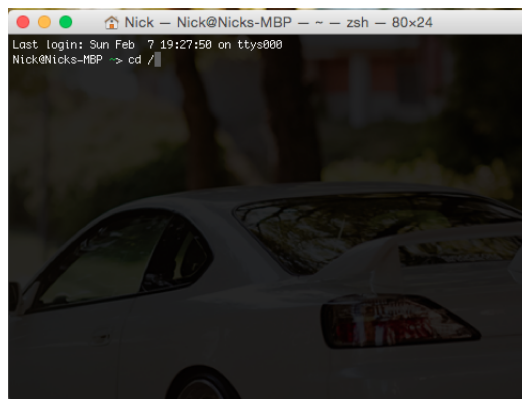
Nick Cicchetti

February 5, 2016

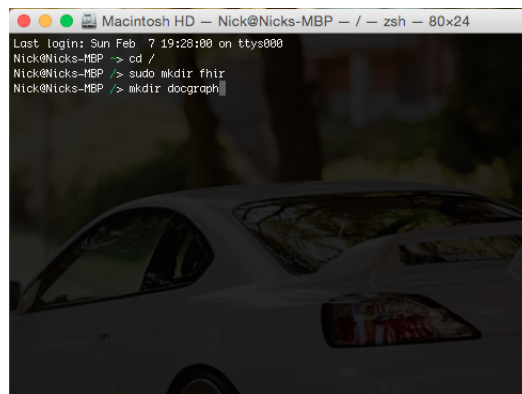
ALL SOURCE CODE WILL BE IN A PYTHON FILE CALLED : Readingand-WritingFiles.py

Mac and Linux Guide

- 1) Hold down Command + Space and type in *Terminal* and hit enter.
- 2) Once you have terminal open type *cd /*

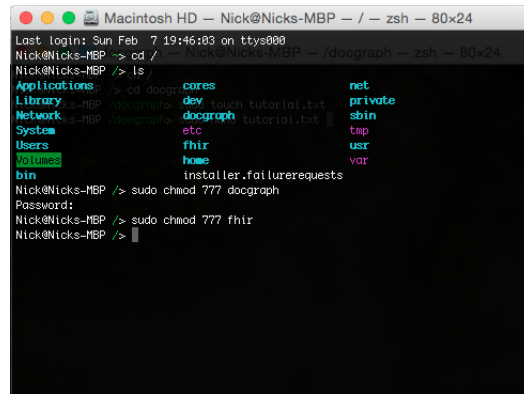


- 3) Then type *sudo mkdir docgraph* and hit enter. Terminal will then prompt you for your password. Type it in and hit enter.
- 4) Next type *sudo mkdir fhir* hit enter this time Terminal will not complain about your password.



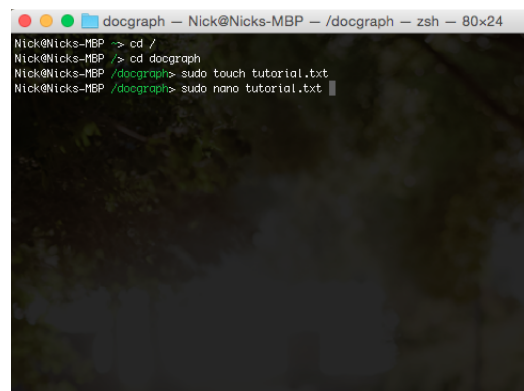
NOTE IF YOU SCREW UP TYPE `sudo rmdir *name of the folder you want to remove` AND TRY STEP 4 AGAIN!

5) Now we will change the permissions on the docgraph and fhir directorys because you do not have the permissions to read or write to them in their current state. To do this, type `sudo chmod 777 docgraph`, `sudo chmod 777 fhir`.



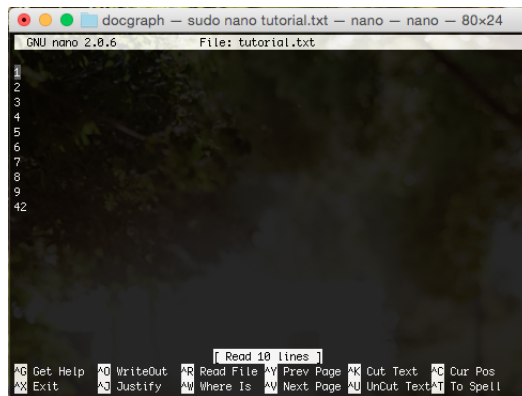
```
Macintosh HD — Nick@Nicks-MBP — / — zsh — 80x24
Last login: Sun Feb  7 19:46:03 on ttys000
Nick@Nicks-MBP ~ % cd / - Nick@Nicks-MBP - /docgraph - zsh — 80x24
Nick@Nicks-MBP / % ls
Applications  > cd docgraph  cores                net
Library       > cd docgraph  dev                  touch tutorial.txt  private
Network       > cd docgraph  docgraph            tutorial.txt        /sbin
System        > cd docgraph  etc                  tap                 usr
Users         > cd docgraph  fhir                 home                var
bin           > cd docgraph  installer.failurerequests
```

6) cd into docgraph and type `sudo touch tutorial.txt`.



```
docgraph — Nick@Nicks-MBP — /docgraph — zsh — 80x24
Nick@Nicks-MBP ~ % cd /
Nick@Nicks-MBP ~ % cd docgraph
Nick@Nicks-MBP /docgraph % sudo touch tutorial.txt
Nick@Nicks-MBP /docgraph % sudo nano tutorial.txt
```

7) Now we will create a test file so type `sudo nano tutorial.txt` and make your text file look like my screen shot below. Once you have done that hit control x, Y, Enter.



8) Fire up your favorite IDE for Python and type in what is in the screen shot below. Run it and check your results against the text file you created.

```
def main():
    #Make sure you start the file path with /
    f = open("/docgraph/tutorial.txt", 'r')
    print(f.read())

if __name__ == '__main__':
    main()
```

```
In [40]:
runfile('/Users/Nick/Documents/NicksMoravianSchoolWork/Spring_2016/CapStone/Tutorials/JIRA/Reading_and_Writing_Files.py',
wdir='/Users/Nick/Documents/NicksMoravianSchoolWork/Spring_2016/CapStone/Tutorials/JIRA')
1
2
3
4
5
6
7
8
9
42
In [41]:
```

9) Now we are going to save a file to the fhir directory. Follow the screen shots below for what to type in the editor. Once you do that *cd into fhir* and *cat testing.txt*.

```
def main():
    #Make sure you start the file path with /
    #f = open("/docgraph/tutorial.txt", 'r')
    #print(f.read())
    write_to('testing.txt')

def write_to(filename):
    # the w+ indicates Opens a file for both writing and reading.
    #Overwrites the existing file if the file exists. If the file does not exist,
    #creates a new file for reading and writing.
    f = open("/fhir/"+filename, 'w+')
    f.write("It's just a flesh wound!")
    f.close()

if __name__ == '__main__':
    main()
```

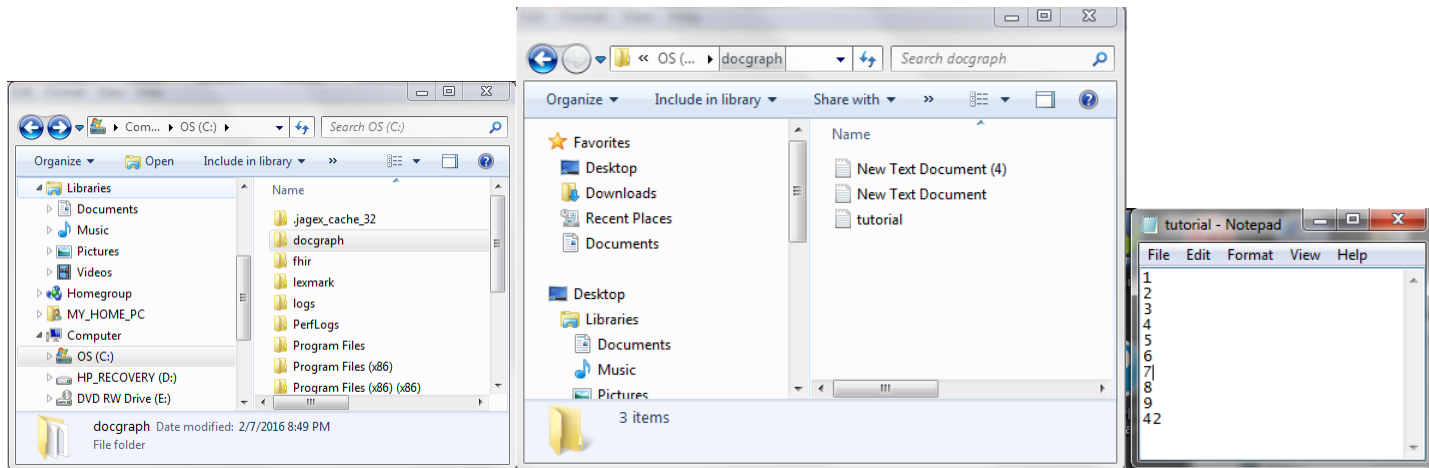
```
Nick@Nicks-MBP /fhir> cat testing.txt
It's just a flesh wound!
Nick@Nicks-MBP /docgraph - zsh -
Nick@Nicks-MBP /fhir>
Nick@Nicks-MBP /> cd docgraph
Nick@Nicks-MBP /docgraph> sudo touch tutorial.txt
Nick@Nicks-MBP /docgraph> sudo nano tutorial.txt
```

10) Congratulations you did it!

Windows

1) First open up your File Explore and Navigate to your C: drive and add the two folders *docgraph* and *fhir*. In the docgraph folder create a text document called tutorial in notepad containing the

same data from the screen shot.



2) Open up your favorite python IDE and copy the code from the screen shot.

```
#!/usr/bin/env python
# coding: utf-8 -*-
"""
Created on Sun Feb  7 19:39:46 2016

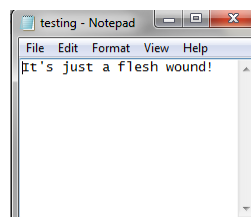
@author: Nick
"""

def main():
    #Make sure you start the file path with /
    f = open("/docgraph/tutorial.txt", 'r')
    print(f.read())
    f.close()
    write_to('testing.txt')

def write_to(filename):
    # the v+ indicates Opens a file for both writing and reading.
    #Overwrites the existing file if the file exists. If the file does not exist,
    #creates a new file for reading and writing.
    f = open("/fhir/"+filename, 'w+')
    f.write("It's just a flesh wound!")
    f.close()

if __name__ == '__main__':
    main()
```

3) Run the code and navigate to the fhir folder and check that there is a testing.txt. Check what's in the testing.txt file with the screen shot below.



4) Congratulations you did it!