1. Add the current date to the text file today.txt as a string.

ANS: **import** datetime

**from** datetime **import** date

now **=** date**.**today()

cur\_date **=** now**.**isoformat()

cur\_date

Out[9]:

'2021-05-04'

In [10]:

**with** open('today.txt','w') **as** file:

file**.**write(cur\_date)

2. Read the text file today.txt into the string today\_string

ANS: **with** open('today.txt','r') **as** file:

today\_string **=** file**.**read()

today\_string

Out[11]:

'2021-05-04'

3. Parse the date from today\_string.

ANS: **from** datetime **import** datetime

format **=** '%Y-%m-%d'

datetime**.**strptime(today\_string,format)

Out[12]:

datetime.datetime(2021, 5, 4, 0, 0)

4. List the files in your current directory

ANS: **import** os

os**.**listdir('.')

['.ipynb\_checkpoints',

'Bhanu.JPG',

'books',

'books.csv',

'books.db',

'demo.docx',

'example.csv',

'example.tsv',

'hellothere.docx',

'meetingminutes.pdf',

'multi.py',

'original.png',

'output.csv',

'PythonAssignment\_10.ipynb',

'PythonAssignment\_2.ipynb',

'PythonBasics1.ipynb',

'PythonBasics\_11.ipynb',

'PythonBasics\_12.ipynb',

'PythonBasics\_13.ipynb',

'PythonBasics\_14.ipynb',

'PythonBasics\_15.ipynb',

'PythonBasics\_16.ipynb',

'PythonBasics\_17.ipynb',

'PythonBasics\_18.ipynb',

'PythonBasics\_19.ipynb',

'PythonBasics\_20.ipynb',

'PythonBasics\_22.ipynb',

'PythonBasics\_23.ipynb',

'PythonBasics\_24.ipynb',

'PythonBasics\_25.ipynb',

'PythonBasics\_3.ipynb',

'PythonBasics\_5.ipynb',

'PythonBasics\_6.ipynb',

'PythonBasics\_7.ipynb',

'PythonBasics\_8.ipynb',

'PythonBasic\_4.ipynb',

'Python\_1.ipynb',

'test.txt',

'test1.txt',

'today.txt',

'Untitled Folder',

'Untitled.ipynb',

'zoo.py',

'\_\_pycache\_\_']

5. Create a list of all of the files in your parent directory (minimum five files should be available).

ANS: os**.**listdir('..')

Out[14]:

['.ipynb\_checkpoints',

'PythonAdvanced',

'PythonAdvancedProgramming',

'PythonBasicProgramming',

'PythonBasics']

6. Use multiprocessing to create three separate processes. Make each one wait a random number of seconds between one and five, print the current time, and then exit.

ANS: **import** multiprocessing

**def** printsec(seconds):

**from** datetime **import** datetime

**from** time **import** sleep

sleep(seconds)

print('wait', seconds, 'seconds, time is', datetime**.**utcnow())

**if** \_\_name\_\_ **==** '\_\_main\_\_':

**import** random

**for** n **in** range(3):

seconds **=** random**.**random()

proc **=** multiprocessing**.**Process(target**=**printsec, args**=**(seconds,))

proc**.**start()

In [16]:

**!**python multi.py

wait 0.25700114370511584 seconds, time is 2021-05-04 11:11:22.606700

wait 0.6398316226840549 seconds, time is 2021-05-04 11:11:22.978403

wait 0.7806718758267396 seconds, time is 2021-05-04 11:11:23.119607

7. Create a date object of your day of birth.

ANS: my\_date **=** date(1982,9,25)

my\_date

Out[17]:

datetime.date(1982, 9, 25)

8. What day of the week was your day of birth?

ANS: my\_date**.**weekday()

Out[18]:

5

9. When will you be (or when were you) 10,000 days old?

ANS: **from** datetime **import** timedelta

day10000 **=** my\_date **+** timedelta(days**=**10000)

day10000

Out[20]:

datetime.date(2010, 2, 10)