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

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

3. Parse the date from today\_string.

4. List the files in your current directory

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

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.

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

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

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

Solutions

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

In [1]:

**import** datetime

*# Code to Add current date to the today.txt file*

file **=** open('today.txt','w')

file**.**write(datetime**.**datetime**.**now()**.**strftime("%d-%m-%Y"))

file**.**close()

*# Code to Read current date from today.txt file*

file **=** open('today.txt','r')

print(file**.**read())

file**.**close()

22-09-2021

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

In [2]:

file **=** open('today.txt','r')

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

print(today\_string)

22-09-2021

#### 3. Parse the date from today\_string.

In [3]:

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

parsed\_data **=** datetime**.**strptime(today\_string, '%d-%m-%Y')

print(parsed\_data)

2021-09-22 00:00:00

#### 4. List the files in your current directory

In [4]:

**import** os

**for** folders, subfolders, files **in** os**.**walk(os**.**getcwd()):

**for** file **in** files:

print(file)

01.Assignment\_01.ipynb

02.Assignment\_02.ipynb

03.Assignment\_03.ipynb

04.Assignment\_04.ipynb

05.Assignment\_05.ipynb

06.Assignment\_06.ipynb

07.Assignment\_07.ipynb

08.Assignment\_08.ipynb

09.Assignment\_09.ipynb

10.Assignment\_10.ipynb

11.Assignment\_11.ipynb

12.Assignment\_12.ipynb

13.Assignment\_13.ipynb

14.Assignment\_14.ipynb

15.Assignment\_15.ipynb

16.Assignment\_16.ipynb

17.Assignment\_17.ipynb

18.Assignment\_18.ipynb

19.Assignment\_19.ipynb

20.Assignment\_20.ipynb

21.Assignment\_21.ipynb

22.Assignment\_22.ipynb

23.Assignment\_23.ipynb

24.Assignment\_24.ipynb

25.Assignment\_25.ipynb

today.txt

21.Assignment\_21-checkpoint.ipynb

22.Assignment\_22-checkpoint.ipynb

23.Assignment\_23-checkpoint.ipynb

24.Assignment\_24-checkpoint.ipynb

25.Assignment\_25-checkpoint.ipynb

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

In [5]:

**import** os

os**.**listdir()

Out[5]:

['.ipynb\_checkpoints',

'01.Assignment\_01.ipynb',

'02.Assignment\_02.ipynb',

'03.Assignment\_03.ipynb',

'04.Assignment\_04.ipynb',

'05.Assignment\_05.ipynb',

'06.Assignment\_06.ipynb',

'07.Assignment\_07.ipynb',

'08.Assignment\_08.ipynb',

'09.Assignment\_09.ipynb',

'10.Assignment\_10.ipynb',

'11.Assignment\_11.ipynb',

'12.Assignment\_12.ipynb',

'13.Assignment\_13.ipynb',

'14.Assignment\_14.ipynb',

'15.Assignment\_15.ipynb',

'16.Assignment\_16.ipynb',

'17.Assignment\_17.ipynb',

'18.Assignment\_18.ipynb',

'19.Assignment\_19.ipynb',

'20.Assignment\_20.ipynb',

'21.Assignment\_21.ipynb',

'22.Assignment\_22.ipynb',

'23.Assignment\_23.ipynb',

'24.Assignment\_24.ipynb',

'25.Assignment\_25.ipynb',

'today.txt']

#### 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.

In [6]:

**import** multiprocessing

**import** time

**import** random

**import** datetime

**def** procOne():

print(f'Proc\_one\_Starttime -> {datetime**.**datetime**.**now()}')

time**.**sleep(random**.**randint(1,5))

print(f'Proc\_one\_Endtime -> {datetime**.**datetime**.**now()}')

**def** procTwo():

print(f'Proc\_two\_Starttime -> {datetime**.**datetime**.**now()}')

time**.**sleep(random**.**randint(1,5))

print(f'Proc\_two\_Endtime -> {datetime**.**datetime**.**now()}')

**def** procThree():

print(f'Proc\_two\_Starttime -> {datetime**.**datetime**.**now()}')

time**.**sleep(random**.**randint(1,5))

print(f'Proc\_two\_Endtime -> {datetime**.**datetime**.**now()}')

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

p1 **=** multiprocessing**.**Process(target**=**procOne)

p2 **=** multiprocessing**.**Process(target**=**procTwo)

p3 **=** multiprocessing**.**Process(target**=**procThree)

p1**.**start()

p2**.**start()

p3**.**start()

p1**.**join()

p2**.**join()

p3**.**join()

Due to some unknown reason. the above did not print any results in the jupyter cell. so i copied the code to a python file. executed it and pasted the ouput here  
(base) C:\Users\vishnu.adepu\Desktop>python es\_poc.py  
Proc\_one\_Starttime -> 2021-09-22 18:41:59.354061  
Proc\_two\_Starttime -> 2021-09-22 18:41:59.363712  
Proc\_two\_Starttime -> 2021-09-22 18:41:59.367238  
Proc\_two\_Endtime -> 2021-09-22 18:42:04.369860  
Proc\_two\_Endtime -> 2021-09-22 18:42:04.369860  
Proc\_one\_Endtime -> 2021-09-22 18:42:04.369860

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

In [7]:

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

my\_dob **=** datetime**.**strptime('22/04/1997','%d/%m/%Y')

print(my\_dob, type(my\_dob))

1997-04-22 00:00:00 <class 'datetime.datetime'>

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

In [8]:

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

my\_dob **=** datetime(1997,4,22)

my\_dob**.**strftime("%A")

Out[8]:

'Tuesday'

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

In [9]:

**from** datetime **import** datetime, timedelta

my\_dob **=** datetime**.**strptime("22/04/1997",'%d/%m/%Y')

future\_date **=** my\_dob**-**timedelta(10000)

future\_date

Out[9]:

datetime.datetime(1969, 12, 5, 0, 0)