**Assignment 21 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)

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**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()

**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)