# **Assignment 21**

#### 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

#### 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)