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()

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)