**Assignment\_21**

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

In [9]:

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

In [10]:

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

In [11]:

now\_str **=** now**.**isoformat()

In [12]:

**with** open('today', 'wt') **as** output: print(now\_str, file**=**output)

1. **Read the text file today.txt into the string today\_string**

In [13]:

**with** open('today', 'rt') **as** input:

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

In [14]:

today\_string

Out[14]:

'2021-07-27\n'

1. **Parse the date from today\_string.**

In [15]:

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

1. **List the files in your current directory**

In [17]:

**import** os

In [18]:

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

Out[18]:

['.ipynb\_checkpoints',

'Assignment\_1.ipynb',

'Assignment\_10.ipynb',

'Assignment\_11.ipynb',

'Assignment\_12.ipynb',

'Assignment\_13.ipynb',

'Assignment\_14.ipynb',

'Assignment\_15.ipynb',

'Assignment\_16.ipynb',

'Assignment\_17.ipynb',

'Assignment\_18.ipynb',

'Assignment\_19.ipynb',

'Assignment\_2.ipynb',

'Assignment\_20.ipynb',

'Assignment\_21.ipynb',

'Assignment\_3.ipynb',

'Assignment\_4.ipynb',

'Assignment\_5.ipynb',

'Assignment\_6.ipynb',

'Assignment\_7.ipynb',

'Assignment\_8.ipynb',

'Assignment\_9.ipynb',

'books.csv',

'books.db',

'test.txt',

'today',

'zoo.py',

'\_\_pycache\_\_']

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

In [19]:

**import** os

In [21]:

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

Out[21]:

['Python Advance Assignment',

'Python Advance Assignment solutions',

'Python Basic Assignment',

'Python Basic Assignment solutions',

'Python Programming Basic Assignment',

'Python Programming Basic Assignment solutions']

**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.**

import multiprocessing

def now(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=now, args=(seconds,)) proc.start()

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

In [26]:

my\_day **=** date(1995, 7, 12)

In [27]:

my\_day

Out[27]:

datetime.date(1995, 7, 12)

1. **What day of the week was your day of birth?**

In [29]:

my\_day**.**weekday()

Out[29]:

2

In [30]:

my\_day**.**isoweekday()

Out[30]:

3

With weekday(), Monday is 0 and Sunday is 6. With isoweekday(), Monday is 1 and Sunday is 7. Therefore, this date was a Saturday.

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

In [31]:

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

In [32]:

party\_day **=** my\_day **+** timedelta(days**=**10000)

In [33]:

party\_day