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)
```

2. 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'
```

3. Parse the date from today_string.

In [15]:

```
fmt = '%Y-%m-%d\n'
datetime.strptime(today_string, fmt)
```

4. 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)

8. 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.

9. 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
```