# 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()
```

```
10-05-2023
```

# 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)
```

```
10-05-2023
```

# 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)
```

```
2023-05-10 00:00:00
```

# 4. List the files in your current directory

In [5]:
```
import os
for folders, subfolders, files in os.walk(os.getcwd()):
    for file in files:
        print(file)
```

```
22.Assignment_22.ipynb
23.Assignment_23.ipynb
24.Assignment_24.ipynb
25.Assignment_25.ipynb
application_log.txt
Assignment_11 Solutions_Shri.pdf
Assignment_11_Solutions.ipynb
Assignment_12 Solutions_Shri.pdf
Assignment_12_Solutions_Shri.ipynb
Assignment_13_Solutions_Shri.ipynb
Assignment_13_Solutions_Shri.pdf
Assignment_14_Solutions_Shri.ipynb
Assignment_14_Solutions_Shri.pdf
Assignment_15_Solutions_Shri.ipynb
Assignment_15_Solutions_Shri.pdf
Assignment_16_Solutions_Shri.ipynb
Assignment_16_Solutions_Shri.pdf
Assignment_17_Solutions_Shri.ipynb
Assignment_17_Solutions_Shri.pdf
Assignment_18_Solutions_Shri.ipynb
Assignment_18_Solutions_Shri.pdf
Assignment_19_Solutions_Shri.ipynb
Assignment_19_Solutions_Shri.pdf
Assignment_20_Solutions_Shri.ipynb
Assignment_20_Solutions_Shri.pdf
Assignment_21_Solutions_Shri.ipynb
books.csv
books.db
test.txt
today.txt
Assignment_11_Solutions-checkpoint.ipynb
Assignment_12_Solutions_Shri-checkpoint.ipynb
Assignment_13_Solutions_Shri-checkpoint.ipynb
Assignment_14_Solutions_Shri-checkpoint.ipynb
Assignment_15_Solutions_Shri-checkpoint.ipynb
Assignment_16_Solutions_Shri-checkpoint.ipynb
Assignment_17_Solutions_Shri-checkpoint.ipynb
Assignment_18_Solutions_Shri-checkpoint.ipynb
Assignment_19_Solutions_Shri-checkpoint.ipynb
Assignment_20_Solutions_Shri-checkpoint.ipynb
Assignment_1 Solutions.ipynb
Assignment_1 Solutions.pdf
Assignment_10 Solutions_Shri.pdf
Assignment_10_Solutions.ipynb
Assignment_11 Solutions_Shri.pdf
Assignment_16.ipynb
Assignment_17.ipynb
Assignment_19.ipynb
Assignment_2 Solutions.ipynb
Assignment_2 Solutions_different.ipynb
Assignment_2.docx
Assignment_22.ipynb
Assignment_23.ipynb
Assignment_24.ipynb
Assignment_25.ipynb
Assignment_3 Solutions.ipynb
Assignment_3 Solutions.pdf
```

```
Assignment_4 Solutions.ipynb
Assignment_4 Solutions.pdf
Assignment_5 Solutions.ipynb
Assignment_5 Solutions.pdf
Assignment_6 Solutions.pdf
Assignment_6_Solutions.ipynb
Assignment_7 Solutions.pdf
Assignment_7_Solutions.ipynb
Assignment_8 Solutions.pdf
Assignment_8_Solutions.ipynb
Assignment_9 Solutions.pdf
Assignment_9_Solutions.ipynb
Assignment_1 Solutions-checkpoint.ipynb
Assignment_10_Solutions-checkpoint.ipynb
Assignment_2 Solutions-checkpoint.ipynb
Assignment_6_Solutions-checkpoint.ipynb
Assignment_7_Solutions-checkpoint.ipynb
Assignment_8_Solutions-checkpoint.ipynb
Assignment_9_Solutions-checkpoint.ipynb
assignment 2 (1).ipynb
assignment 2.ipynb
Assignment_3.docx
Assignment_4.docx
Untitled1 (2).ipynb
Assignment_3 Solutions-checkpoint.ipynb
Assignment_4 Solutions-checkpoint.ipynb
Assignment_5 Solutions-checkpoint.ipynb
Untitled1 (2)-checkpoint.ipynb
```

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

In [6]:
```
import os
os.listdir()
```

Out[6]:
```
['.ipynb_checkpoints',
 '22.Assignment_22.ipynb',
 '23.Assignment_23.ipynb',
 '24.Assignment_24.ipynb',
 '25.Assignment_25.ipynb',
 'application_log.txt',
 'Assignment_11 Solutions_Shri.pdf',
 'Assignment_11_Solutions.ipynb',
 'Assignment_12 Solutions_Shri.pdf',
 'Assignment_12_Solutions_Shri.ipynb',
 'Assignment_13_Solutions_Shri.ipynb',
 'Assignment_13_Solutions_Shri.pdf',
 'Assignment_14_Solutions_Shri.ipynb',
 'Assignment_14_Solutions_Shri.pdf',
 'Assignment_15_Solutions_Shri.ipynb',
 'Assignment_15_Solutions_Shri.pdf',
 'Assignment_16_Solutions_Shri.ipynb',
 'Assignment_16_Solutions_Shri.pdf',
 'Assignment_17_Solutions_Shri.ipynb',
 'Assignment_17_Solutions_Shri.pdf',
 'Assignment_18_Solutions_Shri.ipynb',
 'Assignment_18_Solutions_Shri.pdf',
 'Assignment_19_Solutions_Shri.ipynb',
 'Assignment_19_Solutions_Shri.pdf',
 'Assignment_20_Solutions_Shri.ipynb',
 'Assignment_20_Solutions_Shri.pdf',
 'Assignment_21_Solutions_Shri.ipynb',
 'books.csv',
 'books.db',
 'Python Basics',
 'test.txt',
 '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)
```