

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()
```

03-05-2023

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)
```

03-05-2023

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)
```

2023-05-03 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)
```

Advertising Budget and Sales.csv  
books.csv  
books.db  
housing.csv  
Linear Regression 2.ipynb  
Linear Regression.ipynb  
test.txt  
today.txt  
Untitled.ipynb  
Untitled1.ipynb  
Untitled2.ipynb  
Untitled3.ipynb  
Assignment\_6-checkpoint.ipynb  
Assignment\_10-checkpoint.ipynb  
Assignment\_9-checkpoint.ipynb  
Linear Regression 2-checkpoint.ipynb  
Linear Regression-checkpoint.ipynb  
Programming\_Assignment3-checkpoint.ipynb  
Programming\_Assignment4-checkpoint.ipynb  
Programming\_Assignment5-checkpoint.ipynb  
Untitled-checkpoint.ipynb  
Untitled1-checkpoint.ipynb  
Untitled2-checkpoint.ipynb  
Untitled3-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',
'Advertising Budget and Sales.csv',
'books.csv',
'books.db',
'housing.csv',
'Linear Regression 2.ipynb',
'Linear Regression.ipynb',
'test.txt',
'today.txt',
'Untitled.ipynb',
'Untitled1.ipynb',
'Untitled2.ipynb',
'Untitled3.ipynb']
```

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 output here

```
(base) C:\Users\bhaveshsing\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)

In [ ]: