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

In [6]:

```
from datetime import date
today=date.today().strftime("%Y-%m-%d")
with open("today.txt", "w") as file:
    file.write(today)
```

2. Read the text file today.txt into the string today_string

In [8]:

```
with open("today.txt","r") as file:
    r=file.read()
    print(r)
```

```
2023-05-20
```

3. Parse the date from today_string.

In [10]:

```
from datetime import datetime
today_string = "2023-05-20"
parsed_date = datetime.strptime(today_string, "%Y-%m-%d").date()
print(parsed_date)

```

```
2023-05-20
```

4. List the files in your current directory

In [13]:

```
import os

cwd=os.getcwd()

files=os.listdir(cwd)

print(files)
```

```
['.ipynb_checkpoints', 'ASS18', 'Assignmenmt_5.ipynb', 'Assignment 7.ipyn
b', 'Assignment_1.ipynb', 'Assignment_10.ipynb', 'Assignment_11.ipynb', 'A
ssignment_12.ipynb', 'Assignment_13.ipynb', 'Assignment_14.ipynb', 'Assign
ment_15.ipynb', 'Assignment_16.ipynb', 'Assignment_17.ipynb', 'Assignment_
19.ipynb', 'Assignment_2.ipynb', 'Assignment_20.ipynb', 'Assignment_21.ipy
nb', 'Assignment_3.ipynb', 'Assignment_4.ipynb', 'Assignment_6.ipynb', 'As
signment_8.ipynb', 'Assignment_9.ipynb', 'books.csv', 'books.db', 'resume_
photo.jpg', 'test.txt', 'today.txt', '__pycache__']
```

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

In [18]:

```
import os

parent=os.path.dirname(os.getcwd())
file=os.listdir(parent)
print(files[:5])
```

```
['.ipynb_checkpoints', 'ASS18', 'Assignmenmt_5.ipynb', 'Assignment 7.ipyn
b', 'Assignment_1.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 [19]:

```
import multiprocessing
import random
import time
from datetime import datetime

def process_function():
    wait_time = random.randint(1, 5)
    time.sleep(wait_time)
    current_time = datetime.now().strftime("%H:%M:%S")
    print(f"Process ID: {multiprocessing.current_process().name}, Current Time: {cur

if __name__ == "__main__":
    processes = []

    for _ in range(3):
        process = multiprocessing.Process(target=process_function)
        processes.append(process)
        process.start()

    for process in processes:
        process.join()

```

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

In [21]:

```
from datetime import date

dob=date(2003,4,24)
print(dob)
```

```
2003-04-24
```

8. What day of the week was your day of birth?

In [22]:

```
from datetime import date

dob=date(2003,4,24)

week_day=dob.weekday()
weeks=['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']

print(weeks[week_day])
```

```
Thursday
```

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

In [25]:

```
from datetime import date,timedelta

age=date(2003,4,24)+timedelta(days=1000)

print(age)
```

```
2006-01-18
```

In [ ]:

```

```