Python Basics Assignment 21

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

```
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()
```

```
10-09-2022
```

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

```
file = open('today.txt','r')
today_string = file.read()
print(today_string)
```

```
10-09-2022
```

3. Parse the date from today_string.

```
from datetime import datetime
parsed_data = datetime.strptime(today_string, '%d-%m-%Y')
print(parsed_data)
```

```
2022-09-10 00:00:00
```

4. List the files in your current directory

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

```
Assignment 1.pdf
Assignment 10.pdf
Assignment 11.pdf
Assignment_12.pdf
Assignment_13. pdf
Assignment_14. pdf
Assignment_15. pdf
Assignment_17. pdf
Assignment_18. pdf
Assignment_19. pdf
Assignment_2. pdf
Assignment_20. pdf
```

Assignment_21. pdf
Assignment_3. pdf
Assignment_4. pdf
Assignment_5. pdf
Assignment_6. pdf
Assignment_7. pdf
Assignment_8. pdf
Assignment_9. pdf
books.csv
books.db
Python Basics_Assignment_1. pdf
Python_Basics_Assignment_10. pdf
Python_Basics_Assignment_11. pdf
Python_Basics_Assignment_12. pdf
Python_Basics_Assignment_13. pdf
Python_Basics_Assignment_14. pdf
Python_Basics_Assignment_15. pdf
Python_Basics_Assignment_16. pdf
Python_Basics_Assignment_17. pdf
Python_Basics_Assignment_19. pdf
Python_Basics_Assignment_2. pdf
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Python_Basics_Assignment_24. pdf
Python_Basics_Assignment_25. pdf
Python_Basics_Assignment_3. pdf
Python_Basics_Assignment_4. pdf
Python_Basics_Assignment_5. pdf
Python_Basics_Assignment_6. pdf
Python_Basics_Assignment_7. pdf
Python_Basics_Assignment_8. pdf
Python_Basics_Assignment_9. pdf

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

```
import os
os.listdir()
```

```
['.ipynb_checkpoints',
 'Assignment_1. pdf,
 'Assignment_10. pdf,
 'Assignment_11. pdf,
 'Assignment_12. pdf,
 'Assignment_13. pdf,
 'Assignment_14. pdf,
 'Assignment_15. pdf,
 'Assignment_17. pdf,
 'Assignment_18. pdf,
 'Assignment_19. pdf,
```

'Assignment_2. pdf,
'Assignment_20. pdf,
'Assignment_21. pdf,
'Assignment_3. pdf,
'Assignment_4. pdf,
'Assignment_5. pdf,
'Assignment_6. pdf,
'Assignment_7. pdf,
'Assignment_8. pdf,
'Assignment_9. pdf,
'books.csv',
'books.db',
'Python Basics_Assignment_1. pdf,
'Python_Basics_Assignment_10. pdf,
'Python_Basics_Assignment_11. pdf,
'Python_Basics_Assignment_12. pdf,
'Python_Basics_Assignment_13. pdf,
'Python_Basics_Assignment_14. pdf,
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'Python_Basics_Assignment_18',
'Python_Basics_Assignment_19. pdf,
'Python_Basics_Assignment_2. pdf,
'Python_Basics_Assignment_20. pdf,
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'Python_Basics_Assignment_25. pdf,
'Python_Basics_Assignment_3. pdf,
'Python_Basics_Assignment_4. pdf,
'Python_Basics_Assignment_5. pdf,
'Python_Basics_Assignment_6. pdf,
'Python_Basics_Assignment_7. pdf,
'Python_Basics_Assignment_8. pdf,
'Python_Basics_Assignment_9. pdf,
'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.

```
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()
```

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

```
from datetime import datetime
my_dob = datetime.strptime('12/01/1994','%d/%m/%Y')
print(my_dob, type(my_dob))
```

```
1994-01-12 00:00:00 <class 'datetime.datetime'>
```

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

```
from datetime import datetime
my_dob = datetime(1994,1,12)
my_dob.strftime("%A")
```

```
'Wednesday'
```

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

```
from datetime import datetime, timedelta
my_dob = datetime.strptime("12/01/1994",'%d/%m/%Y')
future_date = my_dob-timedelta(10000)
future_date
```

```
datetime.datetime(1966, 8, 27, 0, 0)
```