

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

Ans:

```
] : from datetime import date
now = date.today()
now_str = now.isoformat()
with open('today.txt', 'wt') as output:
    print(now_str, file=output)
```

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

Ans:

```
] : with open('today.txt', 'rt') as input:
    today_string = input.read()

today_string
```

```
] : '2021-05-04\n'
```

3. Parse the date from today_string.

Ans:

```
9]: from datetime import datetime
fmt = '%Y-%m-%d\n'
datetime.strptime(today_string, fmt)
```

```
9]: datetime.datetime(2021, 5, 4, 0, 0)
```

4. List the files in your current directory?

Ans:

```
In [11]: import os
os.listdir('.')
```

```
Out[11]: ['.ipynb_checkpoints',
'Assignment_10_Soln.ipynb',
'Assignment_11_Soln.ipynb',
'Assignment_12_Soln.ipynb',
'Assignment_13_Soln.ipynb',
'Assignment_14_Soln.ipynb',
'Assignment_15_Soln.ipynb',
'Assignment_16_Soln.ipynb',
'Assignment_17_Soln.ipynb',
'Assignment_18_Soln.ipynb',
'Assignment_19_Soln.ipynb',
'Assignment_1_Soln.ipynb',
'Assignment_20_Soln.ipynb',
'Assignment_21_Soln.ipynb',
'Assignment_2_Soln.ipynb',
'Assignment_3_Soln.ipynb',
'Assignment_4_Soln.ipynb',
'Assignment_5_Soln.ipynb',
'Assignment_6_Soln.ipynb',
'Assignment_7_Soln.ipynb',
'Assignment_8_Soln.ipynb',
'Assignment_9_Soln.ipynb',
'books.csv',
'books.db',
'image.jpg',
'new.zip',
'newimg.jpg',
'Soln.ipynb',
'test.txt',
'today.txt',
'zoo.py',
'__pycache__']
```

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

Ans:

```
In [13]: os.listdir('.')
```

```
Out[13]: ['Assignment_1.docx',
'Assignment_10.docx',
'Assignment_11.docx',
'Assignment_12.docx',
'Assignment_13.docx',
'Assignment_14.docx',
'Assignment_15.docx',
'Assignment_16.docx',
'Assignment_17.docx',
'Assignment_18.docx',
'Assignment_19.docx',
'Assignment_2.docx',
'Assignment_20.docx',
'Assignment_21.docx',
'Assignment_22.docx',
'Assignment_23.docx',
'Assignment_24.docx',
'Assignment_25.docx',
'Assignment_3.docx',
'Assignment_4.docx',
'Assignment_5.docx',
'Assignment_6.docx',
'Assignment_7.docx',
'Assignment_8.docx',
'Assignment_9.docx',
'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.?

Ans:

```
] : !python multi_process.py
```

```
wait 0.11258240976256462 seconds, time is 2021-05-04 14:26:13.559911
wait 0.5027238463295997 seconds, time is 2021-05-04 14:26:13.947904
wait 0.7974100623500293 seconds, time is 2021-05-04 14:26:14.239878
```

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

Ans:

```
] : my_day = date(1996, 8, 10)
my_day
```

```
] : datetime.date(1996, 8, 10)
```

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

Ans:

```
] : my_day.weekday()
```

```
] : 5
```

```
] : my_day.isoweekday()
```

```
] : 6
```

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

Ans:

```
1]: from datetime import timedelta  
   ten_thousand = my_day + timedelta(days=10000)  
   ten_thousand
```

```
1]: datetime.date(2023, 12, 27)
```