

Assignment 21 Solutions

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

ANS:

In [1]:

```
1 import datetime
2 # Code to Add current date to the today.txt file
3 file = open('today.txt', 'w')
4 file.write(datetime.datetime.now().strftime("%d-%m-%Y"))
5 file.close()
6 # Code to Read current date from today.txt file
7 file = open('today.txt', 'r')
8 print(file.read())
9 file.close()
```

05-12-2022

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

ANS:

In [2]:

```
1 with open('today.txt', 'r') as file:
2     today_string = file.read()
3 today_string
```

Out[2]:

'05-12-2022'

3. Parse the date from today_string.

ANS:

In [3]:

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

2022-12-05 00:00:00

4. List the files in your current directory.

ANS:

In [4]:

```
1 import os
2 os.listdir('.')
'Assignment no 19.ipynb',
'Assignment no 2 .ipynb',
'Assignment no 20.ipynb',
'Assignment no 3 .ipynb',
'Assignment no 4 .ipynb',
'Assignment no 5 .ipynb',
'Assignment no 6.ipynb',
'Assignment no 7.ipynb',
'Assignment no 8.ipynb',
'Assignment no 9.ipynb',
'Attribute DataSet.xlsx',
'books.csv',
'books.db',
'Contacts',
'Cookies',
'decision tree .ipynb',
'Documents',
'Downloads',
'Dress Sales.xlsx',
'DressSales.csv',
```

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

ANS:

In [5]:

```
1 import os
```

In [6]:

```
1 os.listdir('..')
```

Out[6]:

```
['abhik',
'All Users',
'Default',
'Default User',
'defaultuser100000',
'desktop.ini',
'Public']
```

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:

In [7]:

```
1 import multiprocessing
2
3 def printsec(seconds):
4     from datetime import datetime
5     from time import sleep
6     sleep(seconds)
7     print('wait', seconds, 'seconds, time is', datetime.utcnow())
8
9 if __name__ == '__main__':
10     import random
11     for n in range(3):
12         seconds = random.random()
13         proc = multiprocessing.Process(target=printsec, args=(seconds,))
14         proc.start()
```

In [8]:

```
1 !python multi.py
```

```
wait 0.47575018177512496 seconds, time is 2022-12-04 18:35:04.888579
wait 0.8666831040448785 seconds, time is 2022-12-04 18:35:05.278480
wait 0.9694652629948074 seconds, time is 2022-12-04 18:35:05.397553
```

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

ANS:

In [9]:

```
1 from datetime import datetime
2 my_dob = datetime.strptime('15/01/1999', '%d/%m/%Y')
3 print(my_dob, type(my_dob))
```

```
1999-01-15 00:00:00 <class 'datetime.datetime'>
```

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

ANS:

In [10]:

```
1 from datetime import datetime
2 my_dob = datetime(1999,1,15)
3 my_dob.strftime("%A")
```

Out[10]:

```
'Friday'
```

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

ANS:

In [11]:

```
1 from datetime import datetime, timedelta
2 my_dob = datetime.strptime("15/01/1999", '%d/%m/%Y')
3 future_date = my_dob-timedelta(10000)
4 future_date
```

Out[11]:

```
datetime.datetime(1971, 8, 30, 0, 0)
```