```
user@box:~/demo$ cd ~/iot
user@box:~/iot$ cd *3
user@box:~/iot/lesson3$ python3 julian.py
Traceback (most recent call last):
  File "julian.py", line 2, in <module>
    from jdcal import *
ModuleNotFoundError: No module named 'jdcal'
user@box:~/iot/lesson3$ pip install jdcal
Collecting jdcal
  Downloading jdcal-1.4.1-py2.py3-none-any.whl (9.5 kB)
Installing collected packages: jdcal
Successfully installed jdcal-1.4.1
user@box:~/iot/lesson3$ python3 julian.py
Calendar Date: 2022-02-14
Julian Date: 2459624.5
Modified Julian Date: 59624.0
user@box:~/iot/lesson3$ python3 date_example.py
Date: 2022-02-14
Date: 02-14-22
Day of Week: Monday
Month: February
Year: 2022
168 days after the first day of classes
-66 days before the last day of classes
user@box:~/iot/lesson3$ python3 datetime_example.py
2022-02-14 16:03:10.187501
2022-02-14 16:03:10.187582
2022-02-14 21:03:10.187599
1644872590.1876118
Mon Feb 14 16:03:10 2022
2022-02-14 16:03:10.187647
2022-02-14 21:03:10.187660
user@box:~/iot/lesson3$ python3 time_example.py
Mon Feb 14 16:03:36 2022
Mon Feb 14 16:03:46 2022
Mon Feb 14 16:03:56 2022
```

```
user@box:~/iot/lesson3$ python3 sun.py "New York"
Information for New York/USA

Timezone: US/Eastern
Latitude: 40.72; Longitude: -74.00

Dawn:     2022-02-14 06:22:46.048370-05:00
Sunrise: 2022-02-14 06:51:24.379977-05:00
Noon:     2022-02-14 12:10:11-05:00
Sunset:  2022-02-14 17:29:27.730971-05:00
Dusk:     2022-02-14 17:58:07.945370-05:00
user@box:~/iot/lesson3$ python3 moon.py
2022-02-14 Moon Phase: 12
2022-02-15 Moon Phase: 12
2022-02-16 Moon Phase: 13
2022-02-17 Moon Phase: 14
2022-02-18 Moon Phase: 15
2022-02-19 Moon Phase: 16
2022-02-20 Moon Phase: 17
2022-02-21 Moon Phase: 18
2022-02-22 Moon Phase: 19
2022-02-23 Moon Phase: 20
2022-02-24 Moon Phase: 21
2022-02-25 Moon Phase: 22
2022-02-26 Moon Phase: 23
2022-02-27 Moon Phase: 24
2022-02-28 Moon Phase: 25
2022-03-01 Moon Phase: 26
2022-03-02 Moon Phase: 27
2022-03-03 Moon Phase: 0
2022-03-04 Moon Phase: 1
2022-03-05 Moon Phase: 2
2022-03-06 Moon Phase: 3
2022-03-07 Moon Phase: 4
2022-03-08 Moon Phase: 5
2022-03-09 Moon Phase: 6
2022-03-10 Moon Phase: 7
2022-03-11 Moon Phase: 7
2022-03-12 Moon Phase: 8
2022-03-13 Moon Phase: 9
```

```
user@box:~/iot/lesson3$ python3 coordinates.py 'SC Williams Library'
SC Williams Library, Field House Road, Hoboken, Hudson County, New Jersey, 07030, United States
(40.74480675, -74.02532862031404)
user@box:~/iot/lesson3$ python3 address.py '40.74480675, -74.02532862031404'
SC Williams Library, Field House Road, Hoboken, Hudson County, New Jersey, 07030, United States
(40.74480675, -74.02532862031404)
```

```
user@box:~/iot/lesson3$ python3 cpu.py
The number of physical cores =  2
The number of logical CPUs =  2
The utilization per second as a percentage for each CPU
[1.0, 4.0]
[3.0, 3.0]
[0.0, 2.0]
[0.0, 2.0]
[1.0, 2.0]
[10.2, 10.5]
[2.0, 1.0]
[1.0, 2.0]
[0.0, 1.0]
[1.0, 1.0]
user@box:~/iot/lesson3$ python3 battery.py
sbattery(percent=42.0, secsleft=<BatteryTime.POWER_TIME_UNKNOWN: -1>, power_plugged=False)
user@box:~/iot/lesson3$ python3 documentstats.py document.txt
Word Count: 1343
Top Ten Words: [('our', 26), ('their', 20), ('has', 20), ('he', 19), ('them', 15), ('these', 13), ('have', 1
1), ('we', 11), ('us', 11), ('people', 10)]
```