

Assignment: Python

- 1: Write a Python program to read a file line by line and store it into a list.
- 2: Write a Python program to calculate the number of days between two dates.

Sample dates: (20200702), (20200711)

- 3: Write a Python program to convert the Python dictionary object (sort by key) to JSON data. Print the object members with indent level 4.
- 4: Write a Python program to sort a list of dictionaries using Lambda.

Original list of dictionaries:

```
[{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Mi Max', 'model': '2', 'color': 'Gold'}, {'make': 'Samsung', 'model': 7, 'color': 'Blue'}]

Sorting the List of dictionaries:

[{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Samsung', 'model': 7, 'color': 'Blue'}, {'make': 'Mi Max', 'model': '2', 'color': 'Gold'}]
```

5: Write a Python program that takes a text file as input and returns the number of words of a given text file.

Note: Some words can be separated by a comma with no space.

6: Write a Python program to convert an array to an array of machine values and return the bytes representation.

Expected Output:

```
Original array:
A1: array('i', [1, 2, 3, 4, 5, 6])
Array of bytes: b'01000000020000000300000040000000500000006000000'
7: Write a script which can read the files line by line with .log ext and print it into a
file, while printing the data from the suffix with present date and time of the system.
 (example of file path are /home/Desktop/demo/test.log,
/home/Desktop/demo/test-1.log, /home/Desktop/demo/test2.log, .....)
 (sample data inside the .log files
   03-17 16:13:38.811 1702 2395 D WindowManager:
printFreezingDisplayLogsopening app wtoken = AppWindowToken{9f4ef63
token=Token{a64f992 ActivityRecord{de9231d u0
com.tencent.qt.qtl/.activity.info.NewsDetailXmlActivity t761}}, allDrawn= false,
startingDisplayed = false, startingMoved = false, isRelaunching = false
   03-17 16:13:38.819 1702 8671 D PowerManagerService: acquire lock=233570404,
flags=0x1, tag="View Lock", name=com.android.systemui, ws=null, uid=10037,
pid=2227
   03-17 16:13:38.820 1702 8671 D PowerManagerService:
ready=true,policy=3,wakefulness=1,wksummary=0x23,uasummary=0x1,bootcomplete
d=true,boostinprogress=false,waitmodeenable=false,mode=false,manual=38,auto=-1,a
dj=0.0userId=0
   03-17 16:13:38.839 1702 2113 V WindowManager: Skipping
AppWindowToken{df0798e token=Token{78af589 ActivityRecord{3b04890 u0
com.tencent.qt.qtl/com.tencent.video.player.activity.PlayerActivity t761}}} -- going to
hide
   03-17 16:13:38.859 2227 2227 D TextView: visible is system.time.showampm
   03-17 16:13:38.861 2227 2227 D TextView: mVisiblity.getValue is false
   03-17 16:13:38.869 2227 2227 D TextView: visible is system.charge.show
```

03-17 16:13:38.887 2227 2227 D TextView: visible is system.ownerinfo.show

)

- 8: Program to Generate random logs and write in a file, once the file size reaches 2Mb open new file and continue writing
- 9: Script to ping and check whether any given IPs are active, also whether given set of software are installed in the existing system (like java, kubectl, aws etc)