

**Aim:** Write python programs to implement different file handling operations.

1. Write a python program which will count the spaces, tabs, and lines in any given text file. Check if the file exists. If file does not exists then handle that exception
2. The file cities\_and\_times.txt contains city names and times. Each line contains the name of the city, followed by the name of the day ("Sun") and the time in the form hh:mm. Read in the file and create an alphabetically ordered list of the form

```
[('Amsterdam', 'Sun', (8, 52)), ('Anchorage', 'Sat', (23, 52)), ('Ankara', 'Sun', (10, 52)),  
('Athens', 'Sun', (9, 52)), ('Atlanta', 'Sun', (2, 52)), ('Auckland', 'Sun', (20, 52)),  
('Barcelona', 'Sun', (8, 52)), ('Beirut', 'Sun', (9, 52)),  
...  
....  
('Toronto', 'Sun', (2, 52)), ('Vancouver', 'Sun', (0, 52)), ('Vienna', 'Sun', (8, 52)),  
('Warsaw', 'Sun', (8, 52)), ('Washington DC', 'Sun', (2, 52)), ('Winnipeg', 'Sun', (1, 52)),  
('Zurich', 'Sun', (8, 52))]
```

Finally, the list should be dumped for later usage with the pickle module.

**Objective of the Experiment:**

1. Understanding **different operations** that can be performed **on files** in python.
2. Understanding **pickle module** in python

**Source code for the implementation:**

**(Write only important functions)**

**Post Labs:**

1. Write a program to find the longest word in a text file.
2. Explain seek() and tell() methods on file in python.
3. How are renaming and deleting performed on a file? Give the syntax for each.
4. Explain "pickle" in python.