**10. Python:As a scripting language**

10.3 Take any txt file and count word frequencies in a file. (hint: file handling+basics)

**Objectives:**

1. To learn about python as scripting option.

**Theory:**

* File handling:

A file is some information or data which stays in the computer storage devices. You already know about different kinds of file , like your music files, video files, text files. Python gives you easy ways to manipulate these files. Generally we divide files in two categories, text file and binary file. Text files are simple text where as the binary files contain binary data which is only readable by computer.

* File opening:

To open a file we use open() function. It requires two arguments, first the file path or file name, second which mode it should open. Modes are like

• “r” -> open read only, you can read the file but can not edit / delete anything inside

• “w” -> open with write power, means if the file exists then delete all content and open it to write

• “a” -> open in append mode

The default mode is read only, ie if you do not provide any mode it will open the file as read only. Let us open a file

>>> fobj = open("love.txt")

>>> fobj

<\_io.TextIOWrapper name='love.txt' mode='r' encoding='UTF-8'>

* Closing a file:

After opening a file one should always close the opened file. We use method close() for this.

>>> fobj = open("love.txt")

>>> fobj

<\_io.TextIOWrapper name='love.txt' mode='r' encoding='UTF-8'>

>>> fobj.close()

* Reading a file:

To read the whole file at once use the read() method.

>>> fobj = open("sample.txt")

>>> fobj.read()

'I love Python\nPradeepto loves KDE\nSankarshan loves Openoffice\n'

**Program:**

f=open("10cfile.txt")

d={}

for line in f:

l=line.split()

for word in l:

if word in d:

d[word]=d[word]+1

else:

d[word]=1

for key in d:

print key," : ",d[key]

**Output:**

it@it-OptiPlex-3046:~$ python uox10.py

a : 2

A : 1

Peter : 4

of : 4

Piper : 4

pickled : 4

Where's : 1

picked : 4

peppers : 4

the : 1

peck : 4

If : 1

**Conclusion:**

1.File handling and manipulation of data using list and dicitionary learnt.

**References:**

[1] https://docs.python.org/3/