PYTHON LAB PROGRAM 6

6) AIM: Demonstration Of reading, writing and organising files
  a) Write a python program to accept a file name from the user and perform the following operations
    1. Display the first N line of the file
    2. Find the frequency of occurrence of the word accepted from the user in the file

Code:

```python
import os.path
import sys

fname = input("Enter the filename: ")

if not os.path.isfile(fname):
    print("File", fname, "doesn't exist")
    sys.exit(0)

with open(fname, "r") as infile:
    lineList = infile.readlines()

for i in range(min(8, len(lineList))):
    print(i+1, ":", lineList[i].strip())

word = input("Enter a word: ")
cnt = 0

for line in lineList:
    cnt += line.count(word)

print("The word", word, "appears", cnt, "times in the file")
```

OUTPUT:

```
Enter the filename: example.txt
1 : Hello my name is Tom the cat.
2 : I like to play and work with my dear friend jerry mouse.
3 : We both have our office and email addresses
4 : They are tomcat@gmail.com, jerrymouse@gmail.com.
5 : Our friend spike has also joined us in our company.
6 : His email address is spikethedog@gmail.com.
7 : We all entertaint the children through our show.
8 : My phone number is +919986059013, +918310681568

Enter a word: email
The word email appears 2 times in the file
```

b) Write a python program to create a ZIP file of a particular folder which contains several files inside it.

```python
import os
import sys
import pathlib
import zipfile
dirName = input("Enter Directory name that you want to backup : ")
if not os.path.isdir(dirName):
    print("Directory", dirName, "doesn't exists")
    sys.exit(0)

curDirectory = pathlib.Path(dirName)

with zipfile.ZipFile("myZip.zip", mode="w") as archive:
    for file_path in curDirectory.rglob("*"):
        archive.write(file_path, arcname=file_path.relative_to(curDirectory))

if os.path.isfile("myZip.zip"):
    print("Archive", "myZip.zip", "created successfully")
else:
    print("Error in creating zip archive")
```

OUTPUT:

```
Enter Directory name that you want to backup : New folder
Archive myZip.zip created successfully
```