Introduction to Python I (Exercises 06) Text Files

1) Try some file system functions that come with the OS module.

   Write a program that does the following:

   1.1 Start by importing the os module

   ```
   import os
   ```

   1.2 Check your current directory by using the os.getcwd() method
   Store the path in a string variable (the path returned by os.getcwd())

   1.3 List the files in your current directory by using the os.listdir() method.
   1.4 List all files in your current directory with a name of 5 characters or less
   1.5 Create (with notepad) a text file in your current directory and check if the file exist from inside your python script by using the os.path.isfile(p). Prompt the user for the file name, and display a suitable message (file exists or does not exist!)
   1.6 Create a new directory (by hand) inside your current working directory. Then, from inside your python script, change directories so that you point to the new directory you just created, use the os.chdir() method. Display your new current directory by using os.getcwd()

   1.7 Create a new directory, but this time from inside your python script by using the os.mkdir() method.

2) Write a small text file in notepad (maybe 3 lines)

   Save the file somewhere in the pc where you have access.
   Open the file and display all the lines on the screen (one line at a time). Use the for loop method of reading text files.

```
#if the file is in your current directory

myfile = open("textfile.txt",'r')

for line in myfile:
    print(line, end='')

myfile.close()
```

3) Write a program that prompts for strings and writes them to a file. The program stops asking for strings if we type ‘Q’ or ‘q’.

Check the file in Notepad or any other editor.

```
filehandle = open("text04.txt", "w")

while True:
    string_name = input('Enter a name: ("q" or "Q" to stop)')

    if string_name in "Qq":
        break

    filehandle.write(string_name + '\n')

filehandle.close()
```