Experiment no 4:

Aim - Write a python program that counts the lines and characters in a file (similar in spirit to part of what wc does on Unix). With your text editor, code a Python module called mymod.py that exports three top-level names:
a) A count Lines (name) function that reads an input file and counts the number of lines in it (hint: file.readlines does most of the work for you, and len does the rest, though you could count with for and file iterators to support massive files too).
b) A count Chars (name) function that reads an input file and counts the number of characters in it (hint: file.read returns a single string, which may be used in similar ways).
c) A test(name) function that calls both counting functions with a given input filename. Such a filename generally might be passed in, hardcoded, input with the input built-in function.

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```
In [1]: import os
        WORKING_DIR = os.getcwd()
        DATA_DIR = os.path.join(os.path.dirname(WORKING_DIR), 'data')
```

```
In [2]: print(DATA_DIR)
```

```
C:\Users\mushrifah\Desktop\mtech sem1\APL\data
```

Count the number of lines in a file

```
In [3]: def count_lines(input_file):
            lines=0
            with open(input_file, 'r') as f:
                for line in f:
                    line=line.split()
                    lines= lines+ 1
            print('Number of lines in the file is ',lines)
```

Count the number of letters in a file

```
In [4]: def count_chars(input_file):
            lines=0
            with open(input_file, 'r') as f:
                f= f.read().replace(" ","")
                print('Number of characters in the file is ',len(f))
```

```python
In [5]: def test():
            in_file = os.path.join(DATA_DIR, 'simple_file.txt')
            count_lines(in_file)
            count_chars(in_file)
```

```python
In [6]: test()
```

```
Number of lines in the file is   4
Number of characters in the file is   45
```

```python
In [ ]:
```