Programming Assignment 3, 7A - Code

```python
filename = input("Enter the input filename: ")
with open(filename, 'r') as file :
    columnOneSum = 0.0
    columnTwoSum = 0.0
    n = 0
    for line in file :
        columnOne, columnTwo = line.split()
        columnOneSum = columnOneSum + float(columnOne)
        columnTwoSum = columnTwoSum + float(columnTwo)
        n = n + 1

columnOneAverage = columnOneSum / n
columnTwoAverage = columnTwoSum / n

print("The averages are %.2f and %.2f" % (columnOneAverage, columnTwoAverage))
```

Programming Assignment 3, 7A - Output

Folder – Before running Code

Name	Date modified	Type	Size
lyrics	3/20/2023 6:59 PM	Text Document	1 KB
lyricsReadingTest	3/20/2023 7:01 PM	Python Source File	1 KB
input	3/20/2023 7:37 PM	Text Document	1 KB
programmingAssignment3A	3/20/2023 7:37 PM	Python Source File	1 KB
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Folder – After running Code

PC > Documents > CS131-47853-homework > Chapter 7

Name	Date modified	Type	Size
lyrics	3/20/2023 6:59 PM	Text Document	1 KB
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programmingAssignment3A	3/20/2023 7:48 PM	Python Source File	1 KB
3aOutput	3/20/2023 7:48 PM	Text Document	1 KB

```
32.00
54.00
67.50
80.25
115.00
--------------------
Total: 348.75
Total: 69.75
```
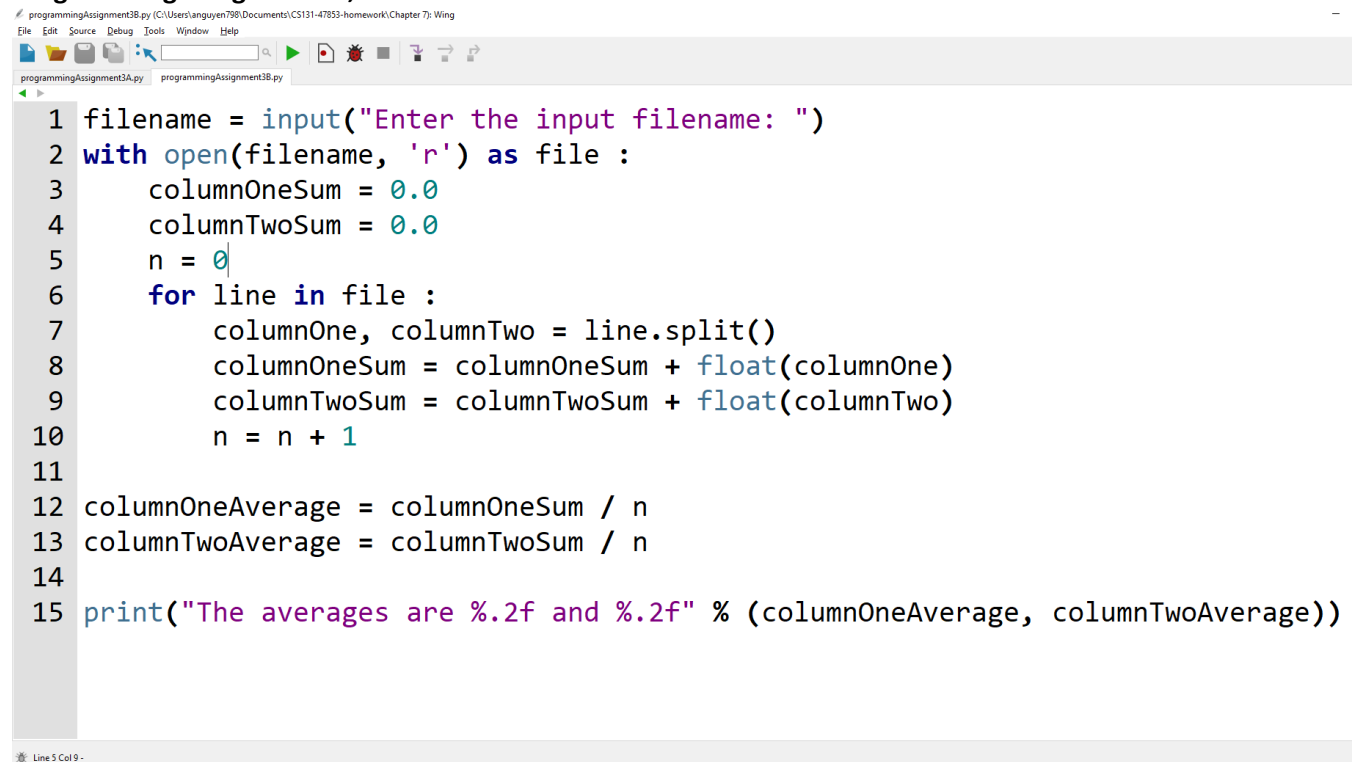
Programming Assignment 3, 7A - Written Code

```python
list = [32.0, 54.0, 67.5, 80.25, 115.0]
listTotal = sum(list)
listAverage = listTotal / len(list)

with open('3aOutput.txt', 'w') as outputFile:
    for integer in list :
        outputFile.write('%.2f\n' % integer)
    outputFile.write('-' * 20 + '\n')
    outputFile.write('Total: %.2f\n' % listTotal)
    outputFile.write('Total: %.2f\n' % listAverage)
```

Programming Assignment 3, 7B - Code

```python
1  filename = input("Enter the input filename: ")
2  with open(filename, 'r') as file :
3      columnOneSum = 0.0
4      columnTwoSum = 0.0
5      n = 0
6      for line in file :
7          columnOne, columnTwo = line.split()
8          columnOneSum = columnOneSum + float(columnOne)
9          columnTwoSum = columnTwoSum + float(columnTwo)
10         n = n + 1
11
12 columnOneAverage = columnOneSum / n
13 columnTwoAverage = columnTwoSum / n
14
15 print("The averages are %.2f and %.2f" % (columnOneAverage, columnTwoAverage))
```

Programming Assignment 3, 7B - Output

Reading from input.txt

Name	Date modified	Type	Size
lyrics	3/20/2023 6:59 PM	Text Document	1 KB
lyricsReadingTest	3/20/2023 7:01 PM	Python Source File	1 KB
input	3/20/2023 7:37 PM	Text Document	1 KB
programmingAssignment3B	3/20/2023 7:39 PM	Python Source File	1 KB
programmingAssignment3A	3/20/2023 7:48 PM	Python Source File	1 KB
3aOutput	3/20/2023 7:48 PM	Text Document	1 KB
nguyen_albert_programming_assignment_3	3/20/2023 7:59 PM	Microsoft Word D...	213 KB

```
1   0.5
2   0.5
3   0.5
4   0.5
```

7B Console Output

✖ Python Shell: Wing

Python Shell

Commands execute without debug. Use arrow keys for history.

```
Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 bit (AMD64)]
Type "help", "copyright", "credits" or "license" for more information.
>>> [evaluate programmingAssignment3B.py]
Enter the input filename: input.txt
The averages are 2.50 and 0.50
>>>
```

Programming Assignment 3, 7B - Written Code

```python
filename = input("Enter the input filename: ")
with open(filename, 'r') as file :
    columnOneSum = 0.0
    columnTwoSum = 0.0
    n = 0
    for line in file :
        columnOne, columnTwo = line.split()
        columnOneSum = columnOneSum + float(columnOne)
        columnTwoSum = columnTwoSum + float(columnTwo)
        n = n + 1

columnOneAverage = columnOneSum / n
columnTwoAverage = columnTwoSum / n

print("The averages are %.2f and %.2f" % (columnOneAverage, columnTwoAverage))
```