

Week 09: Problem Set

Due: 2023-03-24 23:59:00

Description:

Self Grade: 0 of 17 = 0.0%

You have marked this assignment Finished. Click to mark it

In Progress

Questions

Not yet
graded

Q-1: Which of the following commands is used to open a file called `myText.txt` in Read-Only mode?

- ☐ A. `infile = open(myText.txt, "r")`
- ☒ B. `infile = open("myText.txt", "r")`
- ☐ C. `infile = open("myText.txt", "w")`

Check Me

Compare me

✓ We provide a string with file name + "r" which means read only.

Activity: 8.11.1 Multiple Choice (fileEx_read)

Question in Context (/ns/books/published/cmsc-210-spring-2023/files/Exercises.html#fileEx_read)

Not yet
graded

Q-2: Which of the following commands is used to open a file called `myText.txt` in Write-Only mode?

- ☒ A. `outfile = open("myText.txt", "w")`
- ☐ B. `outfile = open("myText.txt", "r")`
- ☐ C. `outfile = open(myText.txt, "w")`

Check Me

Compare me

✓ We provide a string with file name + "w" which means write only.

Activity: 8.11.2 Multiple Choice (fileEx_write)

Question in Context (/ns/books/published/cmsc-210-spring-2023/files/Exercises.html#fileEx_write)

Not yet
graded

Q-3: Which command below closes the already open file `myText.txt` if the following code has already been written?

```
ref_file = open("myText.txt", "r")
```

- ☐ A. `"myText".close()`
- ☒ B. `ref_file.close()`
- ☐ C. `close(ref_file)`

☐ D. `close("myText")`

Check Me

Compare me

✓ This closes the file using the variable it has been assigned to.

Activity: 8.11.3 Multiple Choice (fileEx_close)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_close)

Not yet
graded

Q-4: Which of the commands below is used to add the following string to the end of a file object `filevar` ?

```
somestring = "my Sentence"
```

- ☐ A. `filevar.append(somestring)`
- ☐ B. `filevar.write("somestring")`
- ☒ C. `filevar.write(somestring)`
- ☐ D. `somestring.write()`

Check Me

Compare me

✓ Using dot notation, we can call the write command with the string variable inside the parentheses.

Activity: 8.12.4 Multiple Choice (fileEx_writeLine)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_writeLine)

Not yet
graded

Q-5: The contents of `names.txt` is listed here:

```
Moana
Cinderella
Tiana
```

Which of the following code blocks will print all of the names in `names.txt` ?

I

```
names = open("names.txt", "r")
for line in names:
    print(names)
```

II

```
names = open("names.txt", "r")
for line in names:
    print(line)
```

III

```
names = open("names.txt", "r")
for line in names:
    print("line")
```

- ☐ A. I
- ☒ B. II

- ☐ C. III
- ☐ D. None of the above.

Check Me

Compare me

✓ somestring is a variable and does not need quotation marks around it.

Activity: 8.12.5 Multiple Choice (fileEx_printNames)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_printNames)

Not yet graded

Q-6: What type of loop was used in this chapter to iterate through the lines in a file?

- ☒ A. For loop
- ☐ B. While loop

Check Me

Compare me

✓ A for loop is typically used to iterate through the lines in a file.

Activity: 8.11.6 Multiple Choice (fileEx_loop)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_loop)

Not yet graded

Q-7: True or False? Try and except statements are used to catch errors.

- ☒ A. True
- ☐ B. False

Check Me

Compare me

✓ Try/except statements are used to prevent an exception from terminating a program.

Activity: 8.11.7 Multiple Choice (fileEx_catch)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_catch)

Not yet graded

Q-8: What letter is used to indicate that a file is opening in read only mode?

r

Check me

Compare me

Adding "r" to the end of a file opening command will open it in reading mode.

Activity: 8.11.8 Fill in the Blank (fileEx_r)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_r)

Not yet graded

Q-9: What letter is used to indicate that a file is opening in write only mode?

w

Check me

Compare me

Adding "w" to the end of a file opening command will open it in writing mode.

Activity: 8.11.9 Fill in the Blank (fileEx_w)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_w)

Not yet graded

Q-10: Lines in a file are separated by what character?

newline

Check me

Compare me

A newline (or the symbol n) is used to separate the lines in a file.

Activity: 8.11.10 Fill in the Blank (fileEx_line)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/Exercises.html#fileEx_line)

Not yet graded

The following program should open a file, write a line, and close the file, but the code is mixed up. Drag the blocks of statements from the left column to the right column and put them in the right order. Watch out for extra pieces of code and indentation!

Drag from here

1a | fout = open('output.txt', 'r')

Drop blocks here

1b | fout = open('ouptut.txt', 'w')

2 | file.write("This here's the wattle,\n")

3 | fout.close()

Check

Reset

Help me

Perfect! It took you only one try to solve this. Great job!

Parsons (file_mixed_wattle)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/mixedupCode.html#file_mixed_wattle)

Not yet graded

The following program counts the number of characters in the file "travel_plans.txt", but the code is mixed up. Drag the blocks of statements from the left column to the right column and put them in the right order. First create a variable num and initialize it. Then open the file. Loop reading a line from the file and add the length of each line to num. Then print the result. Watch out for extra pieces of code and indentation!

Drag from here

Drop blocks here

1

num = 0
travelFile =
open("travel_plans.txt", "r")
for line in travelFile:

2

num = num + len(line)

3

print(num)

Check

Reset

Help me

Perfect! It took you only one try to solve this. Great job!

Parsons (file_mixed_travel)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/mixedupCode.html#file_mixed_travel)

Not yet graded

The following program counts the number of lines in the file "travel_plans.txt", but the code is mixed up. Drag the blocks of statements from the left column to the right column and put them in the right order. Watch out for extra pieces of code and indentation!

Drag from here

Drop blocks here

1

travelFile =
open("travel_plans.txt", "r")
num_lines = 0

2

for line in travelFile:

3

num_lines = num_lines + 1

4

print(num_lines)

Check

Reset

Help me

Perfect! It took you only one try to solve this. Great job!

Parsons (file_mixed_lineCount)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/mixedupCode.html#file_mixed_lineCount)

Not yet graded

The following program writes the squares of some numbers to the file "squared_numbers.txt", but the code is mixed up. Drag the blocks of statements from the left column to the right column and put them in the right order. Watch out for extra pieces of code and indentation!

Drag from here

Drop blocks here

1

outfile =
open("squared_numbers.txt", "w")
for number in range(1, 13):
 square = number * number

2

outfile.write(str(square) +
"\n")

3

outfile.close()

Check

Reset

Help me

Perfect! It took you only one try to solve this. Great job!

Parsons (file_mixed_write)

Question in Context (/ns/books/published/cmssc-210-spring-2023/files/mixedupCode.html#file_mixed_write)

Not yet graded

The following program should split the lines of "olympics.txt", then print the name, team, and event of each athlete in a sentence. Unfortunately the code is mixed up. Drag the blocks of statements from the left column to the right column and put them in the right order. Watch out for extra pieces of code and indentation!

Drag from here

Drop blocks here

1

olympicsfile =
open("olympics.txt", "r")

2

for line in olympicsfile:

3

values = line.split(",")
 print(values[0], "is from",
 values[3], "and is on the
 roster for", values[4])
 olympicsfile.close()

Check

Reset

Help me

Perfect! It took you only one try to solve this. Great job!

Parsons (file_mixed_olympics)

Question in Context (/ns/books/published/cmsc-210-spring-2023/files/mixedupCode.html#file_mixed_olympics)

Not yet graded

Write a function `avg_month_close(lines, month)` that takes the `lines` from the stocks file in a list and the abbreviation for a month (i.e. "Jan", "Feb") as parameters and returns the average value of the closing prices during that month for all the years in the file. Each line has: Date, Open, High, Low, and Close. The Date is in the format `day-month-yy`. The month is just the first three letters of the month.

Save & Run

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Show in CodeLens

```
1 def avg_month_close(lines, month):
2     total_close = 0
3     count_close = 0
4
5     for line in lines:
6         values = line.split(',')
7         date_components = values[0].split('-')
8         line_month = date_components[1]
9
10        if line_month[:3] == month:
11            close_price = float(values[4]) # Assuming the closing price is at index 4
12            total_close += close_price
13            count_close += 1
14
15        if count_close == 0:
16            return 0 # Return 0 if there are no closing prices for the given month
17        else:
18            return total_close / count_close
19
20 with open('stocks.txt', 'r') as file:
21     lines = file.readlines()
22
23 average_close_jan = avg_month_close(lines, "Jan")
24 print(f"Average closing price for January: {average_close_jan}")
25
26 average_close_feb = avg_month_close(lines, "Feb")
27 print(f"Average closing price for February: {average_close_feb}")
28
29
```

Average closing price for January: 5640.498461538461
Average closing price for February: 5622.201538461538

Result	Actual Value	Expected Value	Notes
Pass	5640	5640	Testing Jan = 5640
Pass	5622	5622	Testing Feb = 5622=
Pass	5957	5957	Testing Jun = 5957
Pass	5778	5778	Testing Jun = 5778
Pass	6043	6043	Testing Jun = 6043

You passed: 100.0% of the tests

Activity: 8.14.15 ActiveCode (file_ex_abbrq)

Not yet
graded

Fix the errors below so that the `pointGain` function returns a list of all the dates where the Dow Jones gained more than 300 points from open to close. Each line has: Date, Open, High, Low, and Close. The Date is in the format `day-month-yy` . There should be 22 dates.

Save & Run

Show in CodeLens

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```
1 def pointGain():
2     file = open("stocks.txt", "r")
3     date_list = []
4
5     for line in file:
6         values = line.split(',')
7
8         opening = float(values[1])
9         closing = float(values[4])
10
11         if (closing - opening) > 300:
12             date_list.append(values[0])
13
14     file.close()
15     return date_list
16
17
18 if __name__ == "__main__":
19     pass
20
21 from unittest.gui import TestCaseGui
22
23 class MyTests(TestCaseGui):
24     def testOne(self):
25         res = pointGain()
26         self.assertEqual(len(res), 22, "Length(list) == 22")
27         self.assertEqual(res[0], "1-Nov-01")
28         self.assertEqual(res[1], "2-Apr-01")
29
30 MyTests().main()
31
```

Result	Actual Value	Expected Value	Notes
Pass	22	22	Length(list) == 22
Pass	'1-Nov-01'	'1-Nov-01'	
Pass	'2-Apr-01'	'2-Apr-01'	

You passed: 100.0% of the tests

Activity: 8.14.12 ActiveCode (file_ex_300)

You have marked this assignment Finished. Click to mark it

In Progress

This assignment is graded and is no longer accepting submissions. You can still do the work, but it is up to your instructor whether they will accept it or not.

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