CSET214(P) - 02 Sep 2024 - File Handling - Arihant Gupta

Question 1:

1. WAP in Python to accomplish the following task.

- a) Open the text file1 in read, write and append mode; also read the contents of the file1.
- b) Open the water.png file in binary mode, read all lines of png file and print the size of file.
- c) Read only the first 4 characters of file1.
- d) Return all lines of file1 as elements of a list (each line must be an item of list).
- e) Finally close the text and png file.

Code Snippet:

```
1 file = open("Practical\\02sep\\file1.txt", 'r')
2 file2 = open("Practical\\02sep\\water.png", "rb")
3 def q1():
4
       # When opening in write mode, the file is completely cleared, because existing data is overwritten
5
       for each in file:
6
           print(each)
8 def q2():
9
     img_txt = file2.read()
10
       print(img_txt)
11
       print(f"{len(img_txt)} is the size of the image")
13 def q3():
       print(file.read(4))
14
15
16 def q4():
17
       l = [i for i in file]
       print(1)
18
19
21 file.close()
22 file2.close()
23
```

Output:

```
Bennett University.

This is second line.

This is 3rd line.

welcome to colaboratory.

welcome to Data Analysis.

Last line of the file.

PS D:\Bennett University\Sem 3\Data
```

(A) part

448355 is the size of the image PS D:\Bennett University\Sem 3\Data Analysis Using Pyth

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(b) part

ysis Using Py Benn PS D:\Bennett

(c) part

PS D:\Bennett University\Sem 3\Data Analysis Using Python - CSET214> & C:/Users/ariha/AppData/Local/Programs/Python/Python312/python.exe "d:/Bennett University/Sem ysis Using Python - CSET214/Practical/02sep/1.py"
['Bennett University.\n', 'This is second line.\n', 'This is 3rd line.\n', 'welcome to colaboratory.\n', 'welcome to Data Analysis.\n', 'Last line of the file.']
PS D:\Bennett University\Sem 3\Data Analysis Using Python - CSET214> []

(d) part

q4()
file.close()
file2.close()

(e) part

- 2. a) Put the names of your five friends in a list using for loop and write the contents of the list to a text file. Now read the contents of the file.
 - b) Write a program in Python to create a binary file first.bin and write the first five natural numbers in the binary file first.bin; finally print the contents of the binary file.

```
1 def q1():
 2
       1 =[]
 3
       \# 12 = ["Arihant\n", "Arastu\n", "Vansh\n", "Vishnu\n", "Pallav\n"]
 4
       for i in range(5):
 5
           x = str(input("Enter name of friend: "))
 6
           1.append(x+"\n")
 7
       file = open("Practical\\02sep\\two.txt", "a")
 8
 9
       for i in 1:
10
11
           file.write(i)
12
13 def q2():
14
       data = [1,2,3,4,5]
       with open('Practical\\02sep\\one.bin', 'wb') as file:
15
16
           file.write(bytes(data))
17
       with open("Practical\\02sep\\one.bin", "rb") as f:
18
19
           data = f.read()
20
21
       print(data)
22
23 q2()
24
```

Output:

part (a) output

```
PS D:\Bennett University\Sem 3\
ysis Using Python - CSET214/Pra
b'\x01\x02\x03\x04\x05'
PS D:\Bennett University\Sem 3\
```

part (b) output

Question 3:

- 3. WAP in Python to accomplish the following task.
 - a) Create two files and read the content of one file and write it to the other file.
 - b) Write a program in Python that can count the number of occurrences of the words "this" in file1.
 - c) Print the current working directory.

```
import os
cs = os.getcwd()

file1 = open("Practical\\02sep\\f1.txt", "r")
file2 = open("Practical\\02sep\\f2.txt", "a")

data = file1.read()
file2.write(data)

print(data.count("this"))

print(f"Current working directory is: {cs}")
```

Output:

```
ysis Using Python - CSET214/Practical/02sep/3.py"

2

Current working directory is: D:\Bennett University\Sem 3\Data Analysis Using Python - CSET214

PS D:\Bennett University\Sem 3\Data Analysis Using Python - CSET214>
```

Occurrence of "this"

```
Practical > 02sep > = f1.txt

1 My name is Arihant Gupta, this is a good boy. this boy likes to eat.
```

the text file

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