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

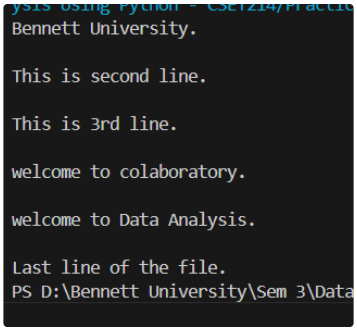
Question 1:

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.

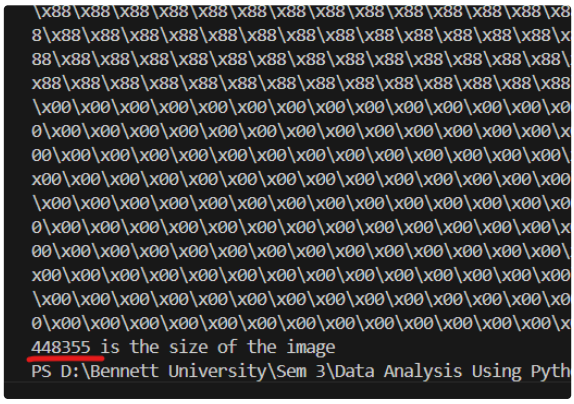
Code Snippet:

```
file = open("Practical\\02sep\\file1.txt", 'r')
file2 = open("Practical\\02sep\\water.png", "rb")
def q1():
    # When opening in write mode, the file is completely cleared, because existing data is overwritten
    for each in file:
        print(each)

def q2():
    img_txt = file2.read()
    print(img_txt)
    print(f"{len(img_txt)} is the size of the image")

def q3():
    print(file.read(4))

def q4():
    l = [i for i in file]
    print(l)


file.close()
file2.close()

```

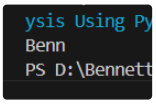
Output:



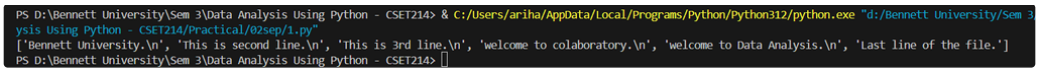
(A) part



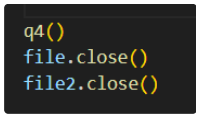
(b) part



(c) part



(d) part



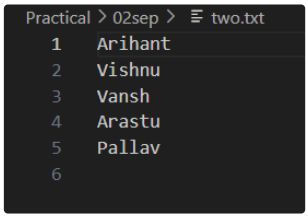
(e) part

Question 2:

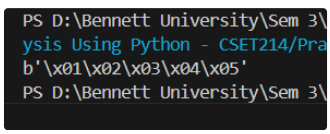
2. a) Put the names of your five friends in a list using for loop and write the contents of the list to a text file. Now read the contents of the file.
b) Write a program in Python to create a binary file first.bin and write the first five natural numbers in the binary file first.bin; finally print the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

```python
def q1():
    l =[]
    # l2 = ["Arihant\n", "Arastu\n", "Vansh\n", "Vishnu\n", "Pallav\n"]
    for i in range(5):
        x = str(input("Enter name of friend: "))
        l.append(x+"\n")

    file = open("Practical\\02sep\\two.txt", "a")

    for i in l:
        file.write(i)

def q2():
    data = [1,2,3,4,5]
    with open('Practical\\02sep\\one.bin', 'wb') as file:
        file.write(bytes(data))

    with open("Practical\\02sep\\one.bin", "rb") as f:
        data = f.read()

    print(data)

q2()

```

Output:



part (a) output



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.

```python
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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