AKTU B.Tech Second Year

PYTHON PROGRAMMING

UNIT 4

Python file operations

LEC-5

Today's Target

- **File program**
- **AKTU PYQs**

Gateway classes

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Write a program to copy the content of one file to another

main.py | source.txt | destination.txt

```
1 hi students how are you?
2
```

main.py | source.txt | destination.txt

```
1 hi students how are you?
2
```

input

```
Content copied from source.txt to destination.txt.
```

Gateway classes

Write a program to copy the content of one file to another

main.py | source.txt | destination.txt

```
1  def copy_file(source_file, destination_file):
2      with open(source_file, 'r') as src:
3          content = src.read()
4      with open(destination_file, 'w') as dest:
5          dest.write(content)
6      print(f"Content copied from {source_file} to {destination_file}.")
7  source_file = 'source.txt'
8  destination_file = 'destination.txt'
9  copy_file(source_file, destination_file)
10
```

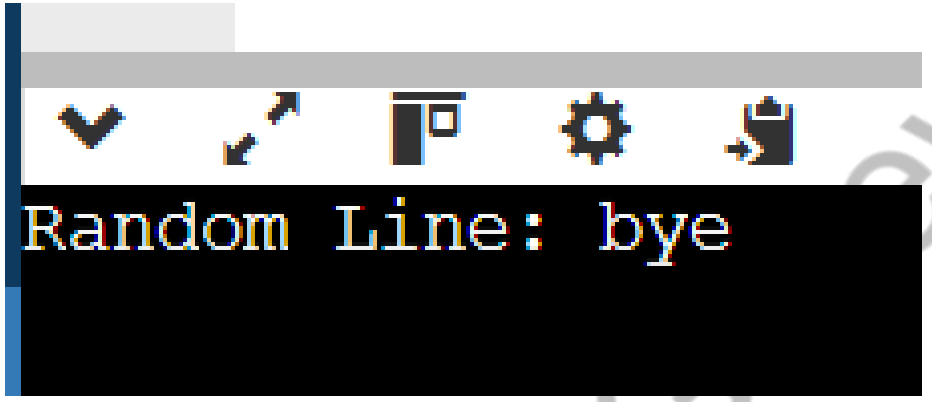
Gateway classes

Write a program to read the random line in a file

```python
import random
# Read a random line from a file
with open('example.txt', 'r') as file:
    lines = file.readlines()
    if lines:
        print("Random Line:", random.choice(lines).strip())
    else:
        print("The file is empty.")
```

main.py | example.txt

```
1 h0
2 hello
3 bye
4 hi
```

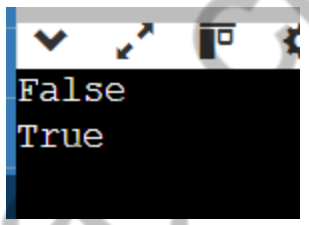


© Geeway classes

Write a python program to asses if file is closed or not

main.py | example.txt

```
1  f=open('example.txt',"r")
2  print(f.closed)
3  f.close()
4  print(f.closed)
5
```



Gateway Classes

Example of zip()

main.py

```
1 list1 = [1, 2, 3]
2 list2 = ['a', 'b', 'c']
3 result = zip(list1, list2)
4 print(list(result))
```

```
[(1, 'a'), (2, 'b'), (3, 'c')]
```

Gateway classes

Write a python program to combine each line from first file wit the corresponding line in second file

main.py | file1.txt | file2.txt | combined.txt

```
1
2  def combine_files(file1, file2, output_file):
3      with open(file1, 'r') as f1, open(file2, 'r') as f2, open(output_file, 'w') as output:
4          for line1, line2 in zip(f1, f2):
5              output.write(line1.strip() + ' ' + line2)
6
7      print(f"Combined content written to '{output_file}'.")
8
9  file1 = 'file1.txt'
10 file2 = 'file2.txt'
11 output_file = 'combined.txt'
12 combine_files(file1, file2, output_file)
13
```

Gateway classes

Write a python program to combine each line from first file wit the corresponding line in second file

main.py | file1.txt | file2.txt

```
1 hello
2 bye
```

main.py | file1.txt | file2.txt | combined.txt

```
1 break
2 objet
```

main.py | file1.txt | file2.txt | combined.txt

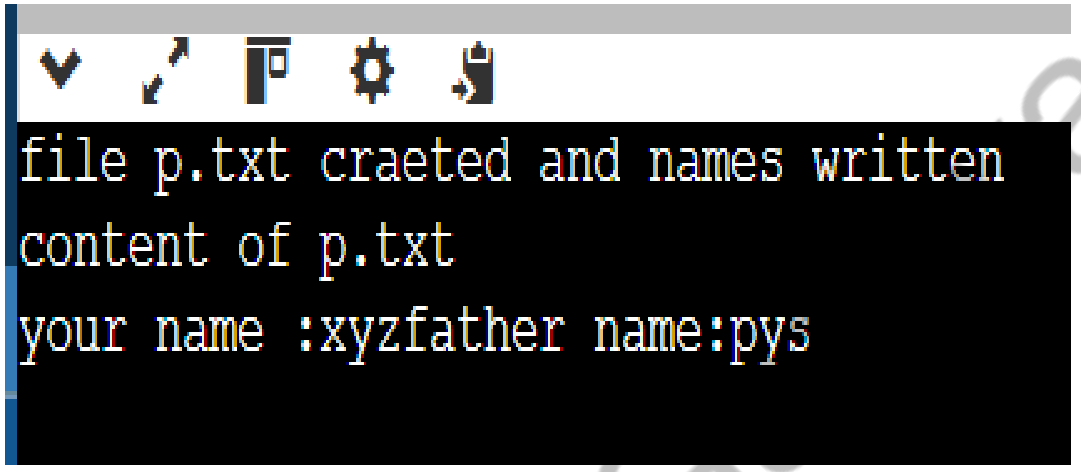
```
1 hello break
2 bye objet
```

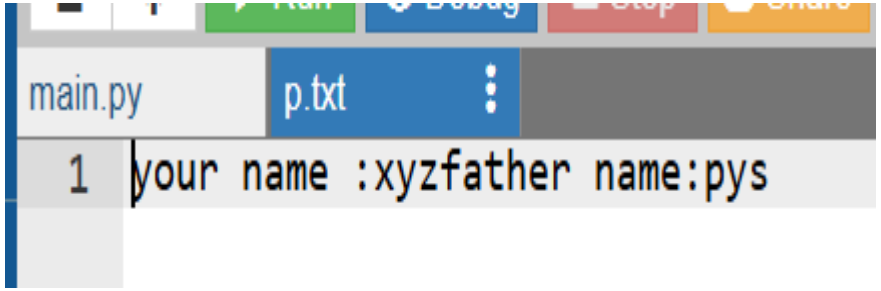
Gateway classes

Write a python code to create a file with p.txt name and write your name and a father name in this file and read this file to print it

main.py | p.txt

```
1 with open ("p.txt","w") as file:
2     file.write("your name :xyz")
3     file.write("father name:pys")
4 print("file p.txt craeted and names written")
5 with open('p.txt','r') as file:
6     contents=file.read()
7     print("content of p.txt")
8     print(contents)
```



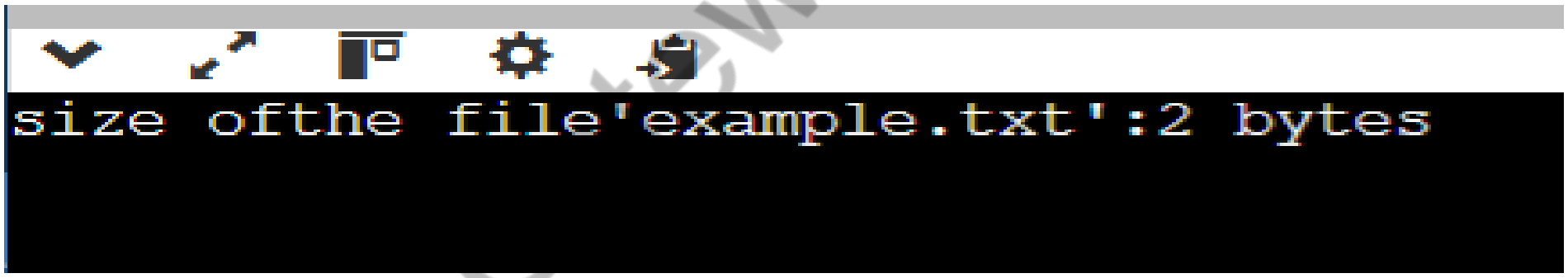


Gay classes

Write a python program to get the file size of a plane file

main.py | example.txt

```
1  import os
2  def get_file_size(filename):
3      if os.path.exists(filename):
4          size=os.path.getsize(filename)
5          print(f"size ofthe file'{filename}':{size} bytes")
6      else:
7          print(f" the file'{filename}'' does not exist")
8  filename="example.txt"
9  get_file_size(filename)
```



Gateway classes

Write a program to remove newline character from file

main.py | example.txt | modified_example.txt

```
def remove_newlines(input_file, output_file):
    with open(input_file, 'r') as file:
        lines = file.readlines()  # Read all lines

    # Remove newline characters from each line
    modified_lines = [line.strip() for line in lines]

    # Write the modified lines back to a new file
    with open(output_file, 'w') as file:
        file.write(' '.join(modified_lines))  # Join lines with a space

    print(f"Newline characters removed and saved to '{output_file}'.")

input_file = 'example.txt'
output_file = 'modified_example.txt'
remove_newlines(input_file, output_file)
```

Gateway classes

main.py | example.txt | modi

```
1 hello
2 bye
3 while
4 hu
```

main.py | example.txt | modified_example.txt

```
1 hello bye while hu
```

Gateway classes

Construct the python program to count the number of letter and digits in given input string into a file object

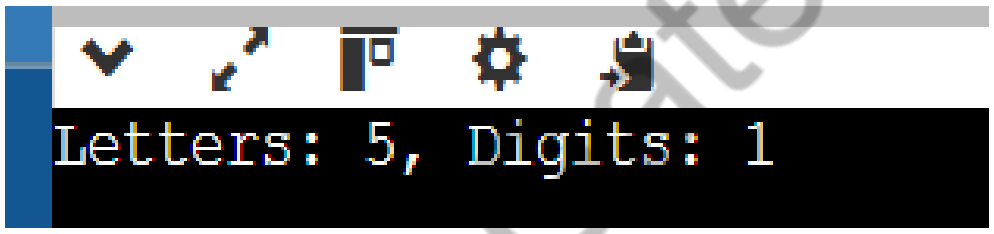
main.py | example.txt

```python
def count_letters_and_digits(file_obj):
    content = file_obj.read()
    letters = sum(c.isalpha() for c in content)
    digits = sum(c.isdigit() for c in content)
    return letters, digits
# Example usage
with open('example.txt', 'r') as file:
    letters, digits = count_letters_and_digits(file)
    print(f"Letters: {letters}, Digits: {digits}")

```

main.py | exam

```
while
2
```



Gateway classes


Thank
you