In [3]:
```python
# 1.Write a program that reads a text file and counts the number
file = open("File.txt","w")
print("Name of the file: ",file.name)
file.write("Hello All,hope you are enjoying learning Python")
```

Name of the file: File.txt

Out[3]: 47

In [4]:
```python
file = open("File.txt","rt")
data = file.read()
words = data.split()

print('Number of words in text file :', len(words))
```

Number of words in text file : 7

In [5]:
```python
# 2.Write a program that copies the contents of one text file to
file = open("File.txt","rb")
file1 = open("File.txt","r")
print(file1.read())

```

Hello All,hope you are enjoying learning Python

In [15]:
```python
# 3.Write a program that encrypts a text file. The program should
#a simple encryption algorithm (such as shifting the ASCII values
#and write the encrypted text to a new file.
source_file_name = input("Enter the name of the source file: ")
destination_file_name = input("Enter the name of the destination
shift_value = int(input("Enter the shifting value: "))
source_file = open(source_file_name, 'r')
destination_file = open(destination_file_name, 'w')
contents = source_file.read()
encrypted_contents = ''
for char in contents:
    if char.isalpha():
        ascii_value = ord(char)
        shifted_value = (ascii_value - ord('a') + shift_value) %
        encrypted_contents += chr(shifted_value)
    else:
        encrypted_contents += char
destination_file.write(encrypted_contents)
source_file.close()
destination_file.close()
print("File encrypted successfully!")
```

Enter the name of the source file: File.txt
Enter the name of the destination file: File1.txt
Enter the shifting value: 2
File encrypted successfully!

In [11]:
```python
#5.Write a program that reads a text file and calculates various
#the number of words, and the average word length.
def calculate_statistics(filename):
    file =open(filename,"r")
    lines = file.readlines()
    line_count = len(lines)
    word_count = 0
```

```
 8        total_word_length = 0
 9        for line in lines:
10            words = line.split()
11            word_count += len(words)
12            total_word_length += sum(len(word) for word in words)
13            if(word_count) > 0:
14                average_word_length = total_word_length / word_count
15            else:
16                print("0")
17
18        print(f"Number of lines: {line_count}")
19        print(f"Number of words: {word_count}")
20        print(f"Average word length: {average_word_length:.2f}")
21    filename = 'File.txt'
22    calculate statistics(filename)
```

```
Number of lines: 1
Number of words: 7
Average word length: 6.43
```

In [3]:
```
1  file = open("File.txt","rb")
2  file1 = open("File.txt","r")
3  print(file1.read())
```

```
Hello All,hope you are enjoying learning Pythonexam
```

In [11]:
```
 1  #6.Write a program that appends a new line of text to an existing
 2  #user to enter the text to be appended and then add it as a new
 3
 4  def append_to_file(file_path):
 5      text = input("Enter the text to append: ")
 6
 7      with open(file_path, 'a') as file:
 8          file.write(text + '\n')
 9      print("Text appended successfully!")
10  file_path = 'File.txt'
11  append to file(file path)
```

```
Enter the text to append: exam
Text appended successfully!
```

In [12]:
```
1  file = open("File.txt","rb")
2  file1 = open("File.txt","r")
3  print(file1.read())
4
```

```
Hello All,hope you are enjoying learning Pythonexam
```

In [12]:
```
 1  #4.Write a program that searches for a specific word in a text fi
 2  #the word to search for, read the file, and display all the lines
 3  def search_word_in_file(filename, word):
 4      with open(filename, 'r') as file:
 5          lines_with_word = []
 6          for line in file:
 7              if word.lower() in line.lower():
 8                  lines_with_word.append(line.rstrip('\n'))
 9
10          if lines_with_word:
11              print(f"Lines containing the word '{word}':")
12              for line in lines_with_word:
```

```
13                        print(line)
14             else:
15                 print(f"No lines found containing the word '{word}'."
16  # Example usage:
17  file_path = input("Enter the name of the text file: ")
18  search_word = input("Enter the word to search for: ")
19  search word in file(file path, search word)
```

```
Enter the name of the text file: File.txt
Enter the word to search for: Hello
Lines containing the word 'Hello':
Hello All,hope you are enjoying learning Pythonexam
```

In [ ]: 1