PYTHON LAB – 10

FILES_IO

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QUESTIONS

1. Write a function in python to read the content from a text file "ABC.txt" line by line and display the same on screen.
2. Write a function in Python to count and display the total number of words in a text file "ABC.txt"
3. Write a function in Python to count uppercase character in a text file "ABC.txt"
4. Write a function display_words() in python to read lines from a text file "story.txt", and display those words, which are less than 4 characters.

1. Write a function in python to read the content from a text file "ABC.txt" line by line and display the same on screen.

```
def displayfile(filename): #Defining function
    try:
        with open(filename, 'r') as file: #opening file
in read mode
            for line in file: #iterating for each line
                print(line.strip()) #printing each line
    except FileNotFoundError: #handling filenotfounderror
exception
        print(f"The file {filename} was not found.")

displayfile("ABC.txt")#calling function
```

OUTPUT:

Python provides an open() function that accepts two arguments, file name and access

mode in which the file is accessed. The open() function allows you to perform

operations like reading, writing, and appending to files.

2. Write a function in Python to count and display the total number of words in a text file "ABC.txt"

```
def displayfile(filename): #Defining function
    try:
        with open(filename, 'r') as file: #opening file in
read mode
            content = file.read() #reading file
            words = content.split() #splitting words
            print(f"The total number of words in {filename}
file is {len(words)}") #Displaying count
            print("The words are ")
            print(words) #displaying words
    except FileNotFoundError: #handling filenotfounderror
exception
        print(f"The file {filename} was not found.")

displayfile("ABC.txt") #calling function
```

OUTPUT:

The total number of words in ABC.txt file is 35

The words are

['Python', 'provides', 'an', 'open()', 'function', 'that', 'accepts', 'two', 'arguments,', 'file', 'name', 'and', 'access', 'mode', 'in', 'which', 'the', 'file', 'is', 'accessed.', 'The', 'open()', 'function', 'allows', 'you', 'to', 'perform', 'operations', 'like', 'reading,', 'writing,', 'and', 'appending', 'to', 'files.']

3. Write a function in Python to count uppercase character in a text file "ABC.txt"

```
def displayfile(filename): #Defining function
    try:
        Uppercase = 0
        with open(filename, 'r') as file:#opening file in
read mode
            for line in file: #iterating each line
                for char in line: #iterating each character
                    if char.isupper(): #checking condition
that is character is in uppercase
                        Uppercase+=1 #if true increasing
value by 1
        print("The number of uppercase characters is
",Uppercase) #displaying count
    except FileNotFoundError: #handling filenotfounderror
exception
        print(f"The file {filename} was not found.")
displayfile("ABC.txt") #calling function
```

OUTPUT:

The number of uppercase characters is 18

4. Write a function display_words() in python to read lines from a text file "story.txt", and display those words, which are less than 4 characters.

```
def display_words(filename): #Defining function
    try:
        Count = 0
        with open(filename, 'r') as file:#opening file in
read mode
            for line in file: #reading file
                words = line.split() #splitting lines to
words
                print("The words are")
                for word in words: #iterating each word
                    if len(word) < 4: #checking if words
length is less than 4
                        Count+=1 #if true increasing count
by 1
                        print(word, end = ", ")
        print("\n\nThe number of words less than 4
character is",Count)#displaying count

    except FileNotFoundError: #handling filenotfounderror
exception
        print(f"The file {filename} was not found.")

display_words("story.txt") #calling function
```

OUTPUT:

The words are

is, an, to, It, has, and, a, but, to, and, its, it, an, for, and, in, on, The, and, the, are, in, or, for, all, the, web, and, may, be, The, of, and, to, and, and, The, is, new, and, in, C, or, C++, (or, C)., is, as, an, for, the, to, the, and, of, the, and, It, to, a, for, but, all, are, so, the, can, be, as,

The number of words less than 4 character is 69