Q. 514.Using a file which consists of multiple statements, find all the words from the file that can be made from all the characters

of given user's string. Note: If user enters same characters multiple times in a string, then word from file will only be eligible for output if it contains that character for same or more number of times in it. (if file have apple, greenapple and user's string is 'aepe' then output will only be greenapple. apple is not eligible as it contains e for 1 time only. For example: If a given file is: String entered by user: nas Output words will be: oranges, bananas, vitamins String entered by user: isi Output words will be: vitamins String entered by user: eee Output words will be: greenapple

```
In [ ]:  def is_eligible(word, user_string):
             # Check if the word can be formed using characters from the user's string
             for char in set(user_string):
                 if word.count(char) < user_string.count(char):
                     return False
             return True
         eligible_words = []
         user_input = input("Enter a string: ").lower()
         with open('abc.txt', 'r') as file:
             words = file.read().split()

             for word in words:
                 if is_eligible(word, user_input):
                     eligible_words.append(word)


         for i in eligible_words:
             print(i,end=",")
```

```
Enter a string: isi
vitamins,
```

Q. 515 Write a Python program to reverse the content of a one file and store it in second file and also convert content of second

file into uppercase and store it in third file and also count number of Vowels in third file and also print only 2nd line from the content of third file. Examples: If data file one contains the following data: Friends are crazy, Friends are naughty ! Friends are honest, Friends are best ! Output 1: ! tseb era sdneirF ,tsenoh era sdneirF ! ythguan era sdneirF ,yzarc era sdneirF Output 2: ! TSEB ERA SDNEIRF ,TSENOH ERA SDNEIRF ! YTHGUAN ERA SDNEIRF ,YZARC ERA SDNEIRF Output 3: Vowels = 22 Output 4: ! YTHGUAN ERA SDNEIRF ,YZARC ERA SDNEIRF

```python
In [ ]: def reverse_file(input_file, output_file):
            with open(input_file, 'r') as file:
                content = file.read()

            reversed_content = content[::-1]

            with open(output_file, 'w') as file:
                file.write(reversed_content)

        def uppercase_file(input_file, output_file):
            with open(input_file, 'r') as file:
                content = file.read()

            uppercase_content = content.upper()

            with open(output_file, 'w') as file:
                file.write(uppercase_content)

        def count_vowels(input_file):
            with open(input_file, 'r') as file:
                content = file.read()

            vowel_count = sum(1 for char in content if char.lower() in 'aeiou')

            return vowel_count

        # Example usage
        input_file = 'data_file_one.txt'
        output_file_two = 'output_file_two.txt'
        output_file_three = 'output_file_three.txt'

        # Task 1: Reverse content and store it in the second file
        reverse_file(input_file, output_file_two)

        # Task 2: Convert content to uppercase and store it in the third file
        uppercase_file(output_file_two, output_file_three)

        # Task 3: Count number of vowels in the third file
        vowel_count = count_vowels(output_file_three)

        # Task 4: Print only the 2nd line from the content of the third file
        with open(output_file_three, 'r') as file:
            second_line = file.readlines()[1]

        # Displaying the results
        print("Output 1:")
        print(open(output_file_two, 'r').read())
        print("Output 2:")
        print(open(output_file_three, 'r').read())
        print("Output 3:")
        print(f"Vowels = {vowel_count}")
        print("Output 4:")
        print(second_line.strip())
```

```
Output 1:
! tseb era sdneirF ,tsenoh era sdneirF
! ythguan era sdneirF ,yzarc era sdneirF
Output 2:
! TSEB ERA SDNEIRF ,TSENOH ERA SDNEIRF
! YTHGUAN ERA SDNEIRF ,YZARC ERA SDNEIRF
Output 3:
Vowels = 22
Output 4:
! YTHGUAN ERA SDNEIRF ,YZARC ERA SDNEIRF
```

Q. 516 Write a python program to extract a list of all four-letter words that start and end with the same letter from a given text file.

```python
In [ ]: with open('560.txt', 'r') as file:
            content = file.read().lower()  # Convert the content to lowercase for case-
            words = content.split()
            for word in words:
                if len(word)==4 and word[0]==word[-1]:
                    four_letter_words=word
                    print(four_letter_words,end=",")
```

area,that,dead,

Q. 517 Write a python program to read a text file "Story.txt" and print only word starting with 'I' in reverse order.

Example: If value in text file is : 'INDIA IS MY COUNTRY' Output will be: 'AIDNI SI MY COUNTRY'

```python
In [ ]: with open('story.txt', 'r') as file:
            content = file.read().upper()  # Convert the content to uppercase for case-
            filtered_words=''
            words = content.split()
            for i in words:
                if i and i[0]=='I':
                    i=i[::-1]
                    filtered_words=filtered_words+i+' '
                else:
                    filtered_words=filtered_words+i+' '
        print(filtered_words)
```

AIDNI SI MY COUNTRY

Q. 518 Write a Python program to count words, characters and spaces from text file.

Input: Python is a Easy Subject OOPs is One of the most interesting Topic Output: No of space: 10 No of word: 13 No of character: 64

```
In [ ]: space=0
        word=1
        ch=0
        f=open("abc.txt",'r')
        data=f.read()
        print(data)
        for i in data:
            ch+=1
            if(i==' '):
                space+=1
            if(i==" " or i=='\n'):
                word+=1
        print("No. of words:",word)
        print("No. of space:",space)
        print("No. of char:",ch-1)
```

```
apple is fruit which is healthy
greenapple is tasty and sweet
oranges and bananas are good for health
fruits are good source of vitamins
No. of words: 24
No. of space: 20
No. of char: 135
```

Q. 519. File Filtering. write all lines of a file1, except those that start with a pound sign (#), the comment character for Python to

file2. And display data of file2. Text file1 content: Friends are crazy, Friends are naughty ! #Friends are honest, Friends are best ! Friends are like keygen, #friends are like license key ! We are nothing without friends, Life is not possible without friends ! Text file2 shoud be: Friends are crazy, Friends are naughty ! Friends are like keygen, We are nothing without friends, Life is not possible without friends !

```python
f=open("Friends.txt")
d=open("abhi1.txt","w")
while(True):
    buff=f.readline()
    if len(buff)!=0:
        if buff[0]=="#":
            continue
        else:
            if "#" in buff:
                for index in range (1,len(buff)):
                    if buff[index]=="#":
                        d.write(buff[0:index])

            else:
                d.write(buff)

    else:
        break
f.close()
d.close()
c=open("abhi1.txt")
print(c.read())
```

Friends are crazy, Friends are naughty !
Friends are like keygen, We are nothing without friends, Life is not possible
without friends !

Q. 520 Write a python program to accept string/sentence from user till the user enters "END". Each string/sentence entered by

user should be a newline in file. Save all the lines in file and display only those lines which begin with capital letter. Example: Enter Something (for quit enter END):Hi Friends Enter Something (for quit enter END):how are you all Enter Something (for quit enter END):I am fine Enter Something (for quit enter END):hope you all are fine Enter Something (for quit enter END):END The Line started with Capital Letters: Hi Friends I am fine

```
In [ ]: def save_lines_to_file(filename):
            with open(filename, 'w') as file:
                while True:
                    user_input = input("Enter something (for quit enter END): ")
                    if user_input.upper() == 'END':
                        break
                    file.write(user_input + '\n')

        def display_lines_starting_with_capital(filename):
            with open(filename, 'r') as file:
                lines = file.readlines()
                print("The lines started with capital letters:")
                for line in lines:
                    if line[0].isupper():
                        print(line.strip())

        filename = "user_input_lines.txt"

            # Save lines to file
        save_lines_to_file(filename)

            # Display lines starting with capital letters
        display_lines_starting_with_capital(filename)
```

```
Enter something (for quit enter END): Hello my friends
Enter something (for quit enter END): How are you?
Enter something (for quit enter END): feeling fine
Enter something (for quit enter END): Hope all are fine
Enter something (for quit enter END): END
The lines started with capital letters:
Hello my friends
How are you?
Hope all are fine
```

Q. 521. Write a program to compare two text files. If they are different, give the line and column numbers in the files where the

first difference occurs. Example: File 1: python1.txt Friends are crazy, Friends are naughty ! Friends are honest, Friends are best ! Friends are like keygen, friends are like license key ! new We are nothing without friends, Life is not possible without friends ! File 2: python2.txt Friends are crazy, Friends are naughty ! Friends 6re honest, Friends are best ! Friends are like keygen, friends are like license key ! new We are nothing without friends, Life is not possible without friends ! Output: line number 2 colNo. 9

```python
In [ ]: def compare_files(file1, file2):
            with open(file1, 'r') as f1, open(file2, 'r') as f2:
                lines1 = f1.readlines()
                lines2 = f2.readlines()

            min_lines = min(len(lines1), len(lines2))
            for line_number in range(min_lines):
                line1 = lines1[line_number]
                line2 = lines2[line_number]

                min_length = min(len(line1), len(line2))
                for col_number in range(min_length):
                    if line1[col_number] != line2[col_number]:
                        print(f"Output: line number {line_number + 1} colNo. {col_numbe
                        return

            if len(lines1) != len(lines2):
                print(f"Output: Files have different number of lines at line number {mi
            else:
                print("Output: Files are identical.")


        file1 = "python1.txt"
        file2 = "python2.txt"

        compare_files(file1, file2)
```

Output: line number 2 colNo. 9

Q. 522

Write a Python program to count the frequency of words in a file Example: File 1: python3.txt
Friends are crazy, Friends are naughty ! Friends are honest, Friends are best ! Friends are like
keygen, friends are like license key ! new We are nothing without friends, Life is not possible
without friends ! Output: Friends - 5,are - 7,crazy, - 1,naughty - 1,! - 4,honest, - 1,best - 1,like -
2,keygen, - 1,friends - 2,license - 1,key - 1,new - 1,We - 1,nothing - 1,without - 2,friends, - 1,Life
- 1,is - 1,not - 1,possible - 1,

```
In [ ]:  #Write a program Count occurrence of each word in given text file (Using dictio
         # Open the file in read mode
         #For running we need to create first sample text file
         text = open("python3.txt", "r")
         # Create an empty dictionary
         d = dict()
         # Loop through each line of the file
         for line in text:
         # Remove the leading spaces and newline character
             line = line.strip()
         # Convert the characters in line to
         # lowercase to avoid case mismatch
             #line = line.lower()
         # Split the line into words
             words = line.split(" ")
         # Iterate over each word in line
             for word in words:
         # Check if the word is already in dictionary
                 if word in d:
         # Increment count of word by 1
                     d[word] = d[word] + 1
                 else:
         # Add the word to dictionary with count 1
                     d[word] = 1
         # Print the contents of dictionary
         for key in list(d.keys()):
             print(key,":", d[key])
```

```
Friends : 5
are : 7
crazy, : 1
naughty : 1
! : 4
honest, : 1
best : 1
like : 2
keygen, : 1
friends : 2
license : 1
key : 1
new : 1
We : 1
nothing : 1
without : 2
friends, : 1
Life : 1
is : 1
not : 1
possible : 1
```

In [ ]: