Week- 7

1. Write a Python code to merge two given file contents into a third file.

First file: file1.txt

```
CMR TECHNICAL CAMPAS
OUR VISION:
To Impart quality education in serene atmosphere thus strive for excellence in Technology and Research.
```

Second file: file2.txt

```
OUR MISSION:
To Create state of art facilities for effective Teaching- Learning Process.
Pursue and Disseminate Knowledge based research to meet the needs of Industry & Society.
Infuse Professional, Ethical and Societal values among Learning Community.
```

Merge.py

```
# Creating a list of filenames
filenames = ['file1.txt', 'file2.txt']

# Open file3 in write mode
with open('file3.txt', 'w') as outfile:

    # Iterate through list
    for names in filenames:

        # Open each file in read mode
        with open(names) as infile:

            # read the data from file1 and file2 and write it in file3
            outfile.write(infile.read())

        # Add '\n' to enter data of file2
        # from next line
        outfile.write("\n")

mergefile = open("file3.txt")

# Reading from file
print(mergefile.read())

mergefile.close()
```

2. Write a Python code to open a given file and construct a function to check for given words present init and display on found.

Note : create a text file (i.e.. sample.txt) in which we want to count the words in Python

Example:
file1.txt

```
CMR TECHNICAL CAMPAS
OUR VISION:
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```

Search.py

```
#To Construct a function to Search a word in a file
def search_word(file_path, word):
    with open(file_path, 'r') as file:
        # read all content of a file
        content = file.read()
        # check if string present in a file
        if word in content:
            print('The  word  {0}  exist in a file'.format(word))
        else:
            print('The  word  {0} does not exist in a file'.format(word))

#To Enter a word for check given words present in it or not
word=input("Enter a word for searching in file :")
search_word(r'file1.txt', word)
```

3. Write a Python code to Read text from a text file, find the word with most number of occurrences

Note : create a text file (i.e.. sample.txt) in which we want to count the words in Python

Example:

Sample.txt

```
Mango banana apple pear
Banana grapes strawberry
Apple pear mango banana
Kiwi apple mango strawberry
```

Count_word.py

```
fname = input("Enter file name: ")
word=input("Enter word to be searched:")
k = 0

with open(fname, 'r') as f:
    for line in f:
        words = line.split()
        for i in words:
            if(i==word):
                k=k+1
print("Occurrences of the word {0} is :".format(word))
print(k)
```

4. Write a function that reads a file *file1* and displays the number of words, number of vowels, blankspaces, lower case letters and uppercase letters.

```
# program to displays the number of words, number of vowels,
# blankspaces,lower case letters and uppercase letters
def analyze_file(file_name):
    try:
        # Opening the file in read mode
        with open(file_name, 'r') as file:
            #Read the file Content
            content=file.read()
            #count the number of words
            words=content.split()
            word_count=len(words)
            #count the number of  vowels
            vowels="aeiou"
            vowel_count=sum(content.lower().count(vowel) for vowel in vowels)
            #count   the number of blank spaces
            blank_space_count=content.count(' ')
            # count the number of lowercase letters
            lowercase_count = 0
            uppercase_count = 0
            for i in content:
                if i.isupper() == True:
                    uppercase_count = uppercase_count + 1
                elif i.islower() == True:
                    lowercase_count = lowercase_count + 1
                else:
                    None
            # Print the desired output on the console.
            print(f"Number of words : {word_count}")
            print(f"Number of vowels : {vowel_count}")
            print(f"Number of Blankspaces: {blank_space_count}")
            print(f"Number of Lowercase letters : {lowercase_count}")
            print(f"Number of Uppercase letters : {uppercase_count}")
    except FileNotFoundError:
        print("File  not found.")
# Calling the function counting which gives the desired output
analyze_file('file1.txt')
```