ASSIGNMENT-VI

1. Count the no of char, word and line in a file.

CODE:
```
file_name = input("Enter the name of the file: ")
with open(file_name, 'r') as f:
    num_lines = 0
    num_words = 0
    num_chars = 0
    for line in f:
        num_lines += 1
        words = line.split()
        num_words += len(words)
        num_chars += len(line)
print("Number of lines: ", num_lines)
print("Number of words: ", num_words)
print("Number of characters: ", num_chars)
```

OUTPUT:
Enter the name of the file: py.txt
Number of lines: 1
Number of words: 89
Number of characters: 544

2. Count the no of given starting 'A'.

CODE:
```
filename = 'py.txt'
count = 0

with open(filename, 'r') as file:
    for line in file:
        words = line.split()
        for word in words:
            if word[0] == 'A':
                count += 1

print(f"The number of words starting with 'A' in the file is: {count}")
```

OUTPUT:
The number of words starting with 'A' in the file is: 0

3. Count the no of vowels.

CODE:
```
filename = 'py.txt'
vowels = 'aeiouAEIOU'
count = 0

with open(filename, 'r') as file:
    for line in file:
        for char in line:
            if char in vowels:
                count += 1

print(f"The number of vowels in the file is: {count}")
```

OUTPUT:
The number of vowels in the file is: 172

4. Count the no of uppercase, lowercase.

CODE:
```
filename = 'py.txt'
upper_count = 0
lower_count = 0

with open(filename, 'r') as file:
    for line in file:
        for char in line:
            if char.isupper():
                upper_count += 1
            elif char.islower():
                lower_count += 1

print(f"The number of uppercase letters in the file is: {upper_count}")
print(f"The number of lowercase letters in the file is: {lower_count}")
```

OUTPUT:
The number of uppercase letters in the file is: 4

5. Find the total occurrence of a specific word.

CODE:

```python
filename = 'py.txt'
word = 'pyramid'
count = 0

with open(filename, 'r') as file:
    for line in file:
        words = line.split()
        for w in words:
            if w == word:
                count += 1

print(f"The word '{word}' occurs {count} times in the file.")
```

OUTPUT:

The word 'pyramid' occurs 1 times in the file.

6. The no of words ending with 'e'.

CODE:

```python
filename = 'py.txt'
count = 0

with open(filename, 'r') as file:
    for line in file:
        words = line.split()
        for word in words:
            if word.endswith('e'):
                count += 1

print(f"The number of words ending with 'e' in the file is: {count}")
```

OUTPUT:

The number of words ending with 'e' in the file is: 20

7. Copy the content of a given file and write it in another file.
CODE:
```
with open('py.txt', 'r') as input_file, open('py2.txt', 'w') as output_file:
    output_file.write(input_file.read())
print('Content Copied')
```

OUTPUT:
Content Copied

8. Delete a given word.
CODE:
```
word_to_delete = 'pyramid'
with open('py.txt', 'r') as input_file, open('py2.txt', 'w') as output_file:
    for line in input_file:
        line_without_word = line.replace(word_to_delete, '')
        output_file.write(line_without_word)
print('Word deleted')
```

OUTPUT:
Word deleted

9. Replace a given word with another.
CODE:
```
word_to_replace = 'pyramid'
replacement_word = 'PYRAMID'
with open('py.txt', 'r') as input_file, open('py2.txt', 'w') as output_file:
    for line in input_file:
        line_with_replacement = line.replace(word_to_replace, replacement_word)
        output_file.write(line_with_replacement)
print('Word Replaced')
```

OUTPUT:
Word Replaced

10 . Print all the words starting with uppercase alphabets.
CODE:

```
with open('py.txt', 'r') as input_file:
    for line in input_file:
        words = line.split()
        for word in words:
            if word[0].isupper():
                print(word)
```

OUTPUT:
In
In
The
For

11 . Find the sum of all even numbers.
CODE:

```
with open('num.txt', 'r') as input_file:
    sum_of_even_numbers = 0
    for line in input_file:
        numbers = line.split()
        for number in numbers:
            number = int(number)
            if number % 2 == 0:
                sum_of_even_numbers += number
    print("Sum of even numbers:", sum_of_even_numbers)
```

OUTPUT:
Sum of even numbers: 612

12 . Remove all the vowels in the file.

CODE:
```
def remove_vowel_words(file_path):
    vowels = ['A','E','I','O','U','a', 'e', 'i', 'o', 'u']
    with open('report.txt', 'r') as file:
        words = file.read().split()
    new_words = [word for word in words if word[0].lower() not in vowels]
    with open('new_report.txt', 'w') as file:
        file.write(' '.join(new_words))
    print('Vowels Removed')
remove_vowel_words('report.txt')
```

OUTPUT:
Vowels Removed