

## Task-6:- Implement various text file operations

### (a). Student Record File Handling

Aim:- To create, read, and student records (name and marks) in a text file.

#### Algorithm:-

1. Create a file and write some student records.
2. Read and display all records from the file.
3. Add new student records to the file.
4. Show the updated records.

#### Program:-

```
# Create file with student records.  
with open("students.txt", "w") as f:  
    f.write("John, 85\n")  
    f.write("Emma, 92\n")  
    f.write("Mike, 78\n")
```

```
print("Initial student records:")
```

```
with open("students.txt", "r") as f:
```

```
    for line in f:
```

```
        print(line.strip())
```

```
with open("student.txt", "a") as f:
```

```
    f.write("Rajesh, 88\n")
```

```
print("\nAfter adding new student:")
```

```
with open("students.txt", "r") as f:
```

```
    for line in f:
```

```
        print(line.strip())
```

Result:- The program successfully created a text file with student records, displayed them, added a new student, and showed the updated records.



### Output:-

Enter filename = sample.txt  
lines : 3  
words : 15  
characters : 85  
words frequency:  
hello : 2  
world : 1  
This : 1  
is : 2  
a : 1  
text : 2  
file : 1  
for : 1  
word : 1  
analysis : 1

## 31/12/29 b. Text file word Analyzer

Aim:- To count lines, words, characters and display word frequency in a text file.

Algorithm:-

1. Ask user for filename.
2. Read the file content.
3. Count lines, words, and characters.
4. Count how many times each word appears.
5. Display all results.

Program:-

```
file_name = input ("Enter filename:")
```

```
with open (filename, "r") as f:
```

```
    content = f.read()
```

```
lines = content.split ('\n')
```

```
num_lines = len (lines)
```

```
words = content.split ()
```

```
num_words = len (words)
```

```
num_chars = len (content)
```

```
word_count = {}
```

```
for word in words:
```

```
    word = word.lower ().strip ('!...!,:;"')
```

```
    if word:
```

```
        word_count [word] = word_count.get (word, 0) +
```

```
print (f "In lines: {num_lines}")
```

~~```
Print (f "words = {num - words}")
```~~~~```
Print (f "characters : {num - chars}")
```~~

```
print ("In word frequency:")
```

```
for word, count in word_count.items ():
```

~~```
    print (f "{word}: {count}")
```~~

**VEL TECH - CSE**

|                         |    |
|-------------------------|----|
| EX NO.                  | 6  |
| PERFORMANCE (5)         | 5  |
| RESULT AND ANALYSIS (5) | 5  |
| VIVA VOCE (5)           | 5  |
| RECORD (5)              | 5  |
| TOTAL (20)              | 15 |
| SIGN WITH DATE          |    |

Result:-

The program successfully read a text file, counted lines, words, characters, and displayed how many times each word appears in the file.

27/9/12