

6.	03/09/25	Implement various text file operations.	15	25/09/25
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### Output:-

Initial student records:

John , 85

Emma, 92

Mike, 78

After adding new student :

John, 85

Emma, 92

Mike, 78

Arijun, 88

VEL TECH - CSE	
EX NO.	1
PERFORMANCE (%)	85
RESULT AND ANALYSIS (%)	92
VIVA VOCE (%)	78
PROJECT (%)	88
THEORY (%)	85
LAB (%)	92

3/9/25

## 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("Arjun", 88\n")
print("\n After adding new student:")
with open("students.txt", "r") as f:
    for line in f:
        print(line.strip())
```

Result:- The program to create a text file with student records, displayed them, add a new student, and show the updated records was successfully executed.

### Output:-

Enter filename: sample.txt  
Lines: 3  
Words: 15  
Characters: 85  
Word frequency:  
hello: 2  
world: 1  
this: 1  
is: 2  
a: 1  
test: 2  
file: 1  
for: 1  
word: 1  
analysis: 1

3/9/25

## (b) Text File Word Analyzer

### Aim:-

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

### Algorithm:-

1. Ask user the 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:-

```

Filename = 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) + 1
    print(f"\n Lines: {num_lines}")
    print(f" Words: {num_words}")
    print(f" Characters: {num_chars}")
    print("\n 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)	25
SIGN WITH DATE	

### Result:-

The program successfully reads text file, counted lines, words, characters, and displays how many times word appears in text.