

Task 6: Implement various text file operation.

03/09/25

6a: Student Record file handling.

- aim: creates a text file and stores student name with their marks
- Reads and displays all student records.
- Appends new student data to the same file.

Algorithm:

1. Start
2. Open a text file in write mode
3. Input number of students
4. For each student:
 - Take name and marks as input
 - Write the data to the file
5. Close the file

Program:

```
def create_student_file(filename):  
    with open(filename, 'w') as file:  
        n = int(input("Enter number of students to add:"))  
        for _ in range(n):  
            name = input("Enter student name: ")  
            marks = input("Enter student marks: ")  
            file.write(f"\n{name},{marks}\n")  
    print("Student records saved successfully!")  
  
if choice == '1':  
    create_student_file(filename)  
elif choice == '2':  
    read_student_file(filename)  
elif choice == '3':  
    append_student_file(filename)  
elif choice == '4':  
    print("Exiting program.")  
  
break  
else:  
    print("Invalid choice. Please try again!")
```

Result: Thus, the student record file handling program

executed successfully.

Sample inputs:-

Enter your choice (1-4)=1

enter number of students to add : 2

enter student name : Alice

enter student marks : 85

enter student name : Bob

enter student marks : 92

Output:-

Alice, 85

Bob, 92

Student Name	Student Marks
Alice	85
Bob	92

Task 6b: Text file word analyzer.

03/09/25

- Items:- Read a text file given by the user
- counts the number of lines, words and characters
- Displays the frequency of each word in the file

Algorithms:-

1. Start
2. prompt the user to enter the filename
3. Try to open the file in read mode
4. Initialize counters for lines, words, characters, and adictions for word frequency
5. Increment line count
6. Display each word with its frequency
7. If the file doesn't exist, handle the error
8. End.

Programs:

```
def analyze_text_file(filename):
    try:
        with open(filename, 'r') as file:
            line_count = 0
            word_count = 0
            char_count = 0
            word_freq = defaultdict(int)
            print("File analysis result---")
            print(f"Total lines : {line_count}")
            print(f"Total words : {word_count}")
            print(f"Total characters : {char_count} (in) - CSE")
            print("----Word frequency----")
            print(f" {word} : {freq}")
    except FileNotFoundError:
        print("File not found")
    else:
        filename = input("Enter the filename to analyze")
        analyze_text_file(filename)
```

EX NO. 7	
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	3
VIVA VOCE (5)	3
TOTAL (20)	13
SIGN WITH DATE	

Result:- Thus, the Text file word Analyzer program
Executed Successfully.

8/15/25

Sample Input:-

hello world

this is a sample file

hello again, world.

Sample Output:-

Total lines: 3

Total words: 10

Total characters: 60