

Task 6(a): Implement various text file operation 12/9/25

(a) Student Record file Handling.

Aim: To write a python program to create, Read, append, and search student records in a text file named students.txt.

Algorithm:-

1. Start
2. Create and open a file students.txt in write mode & store name with marks.
3. Read the file contents and display all student records.
4. Append new student data to the same file.
5. Search for a student name inside the file.
6. Display the result of the search.
7. Stop

program:-

```
# Student Record file handling
```

```
def create_file():
```

```
    with open("students.txt", "w") as
```

```
        f:
```

```
            n = int(input("Enter number of student name:"))
```

```
            for i in range(n):
```

```
                name = input("Enter student name: ")
```

```
                marks = input("Enter marks: ")
```

```
                f.write(name + " " + marks + "\n")
```

```
def read_file():
```

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

```
        f:
```

```
            print("\n Student records: ")
```

```
            print(f.read())
```

```
def append_file():
```

```
    with open("students.txt", "a") as
```

```
        f:
```

```
name = input("Enter new student's name: ")
```

```
marks = input("Enter marks: ")
```

```
f.write(name + " " + marks + "\n")
```

```
def search_student():
```

```
    name = input("Enter name to search: ")
```

```
    found = False
```

```
    with open("Students.txt", "r") as
```

```
f:
```

```
    for line in f:
```

```
        if name in line:
```

```
            print("Record found:", line.strip())
```

```
            found = True
```

```
    if not found:
```

```
        print("Records not found")
```

```
# Main Menu
```

```
while True:
```

```
    print("\n --- Student Record Menu --- \n")
```

```
    print("1. Create file")
```

```
    print("2. Read file")
```

```
    print("3. Append file")
```

```
    print("4. Search student")
```

```
    print("5. exit")
```

```
    choice = int(input("Enter choice: "))
```

```
    if choice == 1:
```

```
        create_file()
```

```
    elif choice == 2:
```

```
        read_file()
```

```
    elif choice == 3:
```

```
        append_file()
```

```
    elif choice == 4:
```

```
        search_student()
```

```
    elif choice == 5:
```

```
        break
```

```
    else:
        print("Invalid choice!")
```

--- Student Record Menu ---

1. Create file
2. Read file
3. Append file
4. Search student
5. Exit

Enter choice : 1

Enter number of student : 2

Enter student name : Raj

Enter marks : 90

Enter student name : Ravi

Enter marks : 85

~~Read file~~ File Created Successfully

Enter choice : 2

--- Student record ---

Raj 90

Ravi 85

Enter choice : 3

Enter new student name : Meena

Enter marks : 95

Record appended Successfully

Enter choice : 4

Enter name to Search : Ravi

Record found : Ravi 85

Enter choice : 5

Exiting program ...

File content (Student.txt) after execution:

Asha 90

Ravi 85

Meena 95

Result : Thus , python program to create , read , append and search student record in a text file named Student.txt is executed.

Task 6(B): word count Analyzer

12/9/25

Aim: To write a python programming to read a text file and count the number of lines, word, character, Display the frequency of each word in the file and store the analysis in file named Analysis.txt

Algorithm:

1. Start
2. open the text file in read mode
3. Read the contents of the file
4. Count the number of lines, words and character.
5. Find the frequency of each word
6. Display all the count and frequencies
7. Write the analysis to a new file named analysis.txt
8. Close all files
9. Stop

Program:

```
filename = input("Enter file name: ")
```

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

```
    text = f.read()
```

```
lines = text.splitlines()
```

```
words = text.split()
```

```
chars = len(text)
```

```
print("Lines:", len(lines))
```

```
print("Words:", len(words))
```

```
print("Characters:", chars)
```

```
freq = {}
```

```
for word in words:
```

```
    word = word.lower().strip('.,!?'')
```

```
    freq[word] = freq.get(word, 0) + 1
```

Sample output

Enter filename : Sample.txt

Lines : 2

Words : 17

Characters : 122

Word Frequencies :

python : 3

is : 3

powerful : 1

easy : 1

to : 1

learn : 1

used : 1

in : 1

data : 1

Science : 1

web : 1

development : 1

and : 1

automation : 1


```

print ("\n word Frequencies : ")
for w, c in freq.items():
    print (f"{w} : {c}")

```

with open ("analysis.txt", "w") as out :

```

out.write (f" Lines : {len (lines)} \n words : {len (words)} \n characters : {chars} \n \n")

```

```

out.write ("word Frequencies : \n")

```

```

for w, c in freq.items():

```

```

    out.write (f"{w} : {c} \n")

```

VEL TECH	
EX No.	
PERFORMANCE (5)	6
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	5
RECORD (4)	5
TOTAL (15)	25
DATE	

Result :- To write a python programming to execute a word count analyser and store it in a file named analysis.txt