Implement various txt/csv file operations.

Aim: To write a python program for creating and updating student registration details file operations.

Algorithm:

Step1: Start.

Step2: Using the open() method, create and write text file, "myfile.txt" with student detail

Step3: update the new registered student details using append operations in it.

Step4: Open the file in read mode and using read() method print the student details.

Step5: Using seek method print the particular student record.

Step6: Using tell method print the current position of the file

Step7: Close the file

Step8: Stop.

Program:-

```
file = open ("student.txt", "w")
input = input ("Enter columns name (n")
file.write (input)
file.write ("\n")

n = int (input ("Enter the no of students"))
    for i in range (0,n):
        input2 = input ("Enter student's details with
```

output:

Student Details using Read Function is:

VTO NO NAME	AGE
2305 RAM	20
1920 SHIVA	21
2305 RAM	20
1920 SHIVA	21

The length of first line is:

15

output of Read line (first student record) function is:

2305 RAM 20

find the current position of file Pointee:

29

```python
with for new")
    file.write(input2)
    file.write("\n")
file =open("Student1.txt","a")
    input3 =input("Enter updated students details\n")
    file.write(input3)
    file =open("Student1.txt","r")
    print("student Details using Read function is:")
    Print(file.read())
    print("\n")
file.seek(0)
Print("The length of first line is:")
    line =file.readline()
    len =len(line)
    print(len)
file.seek(len+1)
print("output of Readline (first student record)
        function is:")
Print(file.readline())
Print("\n find the current current position of file
                pointer")
    f=file.tell()
    Print(f)
    file.close()
```

Result: Thus, the python program for creating and
- updating student registration details using text file operations
                                    was executed successfully.

Counting cases.

Construct a python program whose file name is "meege text". to Illustrate the below content inside of the file.

"Python is a High level language, developed by Guido van Rossum in 1991" count the total number of upper case, lower case, and digits used in the text file "meege ·txt".

Input:

File name :-meege.txt

output :- 5, 48, 4

program to count uppacase, lower case and digits in a file (meege ·txt)

step1:- Create and write content to the file
    with open ("meege .txt", "w") as f:
    f -write ("python is a High level ·language, developed by Guido van Rossum in 1991 ")

step 2:- open the file for reading
    with open ("meege ·txt", "r") as f:
        text = f.read ()

# step3: Initialize Counters
        upper_count = 0

        lower _count = 0
        digit _count = 0

```python
# Step4 - Count uppercase, lowercase, and digits
    for char in text:
    if char.isupper():
    upper_count += 1
    elif char.islower():
    lower_count += 1
    elif char.isdigit():
    digit_count += 1
# Step 5: print the result.
    print(" uppercase letters:", upper_count)
    print(" lowercase letters:", lower_count)
    print("Digit:", digit_count)

# compact output as required
    print(f" {upper_count}. {lower_count}.
                {digit_count}")
```

Construct a python program to read the above table of students grades from a text file (grades.txt) Calculate average grade for each student and print out the result as students name along with their average grade using another text file (results.txt).

Program

```
# Program to read students grades from a file,
  Calculate averages, and save results
# step1 = Read input data from grades.txt
  with open ("grades.txt", "r") as f:
      lines = f.readlines()
  # Step 2 = Extract number of students.
    n = int (lines [0].strip())
  # step3 = Extract weights
      weights = lines [1].strip().split()).s'
      weights = [float (w) for w in weights]
    # step u: process each student's data
    - students=[]
    for i in range (2, 2+n):
        parts = lines [i].strip(). split()
        name = parts [0]
        marks = [int (m) for m in parts[1:]]
    # Calculate weighted average.
        total = 0
```

output :- result 8 txt (output)

Gaurav → 169.0

Abhinav → 138.0

Harvard → 152.0

Jai → 163.0

Ravi → 188.0

```
for j in range (u):
    total = total + marks [j] * weights [j]
    students - append ((name, round (total, 2)))
# Step 5 - Write results into results.txt.
with open ("results.txt", "w") as R:
    for name, avg in (students:
        4 . write (name + "1 + " + . (str(avg) + "\n")
Print ("Average grades have been written to
        results .txt")
```

Result:- Thus, the python program for creating
and tablets student grades from a textfile
        is successfully executed.