Task-6 Implement various txt/csv file operations

Q.1:

Aim: To write a Python Program for creating and updating Student registration details using txt file operations.

Algorithm:

1. Start
2. Using open() method, create and write text file "myfile.txt" with Student details.
3. Update the new registered student details using append operation in it.
4. Open the file in read mode and using read() method Print the Student details
5. Using seek method Print the particulars student record.
6. Using tell method Print the current position of the file
7. close the file.
8. Stop.

Program

```
file = open("Student 1.txt","w")
input 1 = input("Enter column name\n")
file.write(input1)
file.write("\n")
n=int(input("Enter the no of students"))
for i in range(0,n):
    input 2 = input("Enter Students details with for row")
    fwrite(input 2)
    file.write("\n")
file.seek(0)
Print("The length of first line is:")
line = file.readline()
len = len(line)
Print(len)
```

Output:

Student Details using Read function is:

VRU NO	NAME	AGE
2305	RAM	20
9920	SHIVA	21
2305	RAM	20
1920	SHIVA	21

The length of first line is:

15

output of Readline (first Student record) function is:

2305 RAM 20

find the current position of file pointer:

29

```
file.seek(len+1)
Print("Output of Readline(first student record) function is:")
Print(file.readline())
Print("In find the current position of file pointer:").
f = file.tell()
Print(f)
file.close()
```

PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	

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

Q2: Counting cases

Construct a Python program whose file name is "merg.txt". To illustrate to below content inside of the file.

"Python is a High level language, developed by Guido van Rossum in 1991."

Count the total numbers of upper case, lower case, and digits used in the txt file "merge.txt".

Input:
File name: merg.txt

Output: 5, 48, 4

Program:

```
with open("merg.txt","w") as f:
    f.write("Python is a High level language, developed by
            Guido van Rossum in 1991.")
with open("merg.txt","r") as f:
    text = f.read()
upper_count = 0
lower_count = 0
digit_count = 0
for char in text:
    if char.isupper():
        upper_count += 1
    elif char.islower():
        lower_count += 1
    elif char.isdigit():
        digit_count += 1
Print("Upper case letters:", upper_count)
Printf("Lower case letters:", lower_count)
Print("Digits:", digit_count)
Print(f"{upper_count}, {lower_count}, {digit_count}")
```

Input: 4

0.2 0.3 0.4 0.5

Gaurav 100 80 90 75

Abhinav 70 50 60 90

Harvard 60 80 50 100

Jai 70 80 60 90

Q.3 Avg grade:

A veltech faculty assigns the following weightages of marks/grades on four assignments for five students in the Python course

Program:

```
n = int(input("Enter number of students: "))
print("Enter 4 assignments weightages: ")
weightages = []
for i in range(4):
    w = float(input(f"weight {i+1}: "))
    weights.append(w)
students = []
for i in range(n):
    print(f"\n Enter name of student {i+1}: ")
    name = input()
    marks = []
    for j in range(4):
        m = int(input(f"Enter marks {j+1} for {name}: "))
        marks.append(m)
    students.append([name]+marks)
print("Average grades")
for student in students:
    name = student[0]
    marks = student[1:]
    total = 0
    for j in range(4):
        total = total + marks[j]*weights[j]
print(name, "→ Average Grade :", round(total, 2))
```

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

Result: Thus the Python Program for creating and updating Trade registration using text files. Operations is executed successfully