

6 Implement Various text/csv file operations

Aim: To write a Python Program for creating and updating student registration details using text file operation.

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. Using seek method Point the particular student record
5. using tell method Point the current position of the file
6. Close the file
7. Stop

Program:

```
file = open("student1.txt", "w")
input1 = input("Enter columns name\n")
file.write(input1)
file.write("\n")
n = int(input("Enter the no of students"))
for i in range(0, n):
    input2 = input("Enter students details with \n for new")
    file.write(input2)
    file.write("\n")
```

```
file = open("student1.txt", "a")
input3 = input("Enter updated students details\n")
file.write(input3)
```

Output

Exception objects are thrown when runtime errors occur.

The error object can also be used as a base object for user-defined exceptions.

~~object for user-defined exceptions~~

ARL TECH	
EX NO.	REPORTING DATE
1	RECORDS (2)
2	RESULTS AND ANALYSIS (2)
3	DATA SOURCE (2)
4	RECORD (2)
5	LOTAL (20)

```
file = open("student1.txt", "r")
print("student details using Read function is:")
print(file.read())
print("I'm")  
file.seek(0) Let's see how will it work
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("I'm find the current position of file pointer:")
f = file.tell()
print(f)
file.close()
```

Result: thus the program for creating and updating student registration

6.2 Counting Cases

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

Program

```
with open("medge.txt", "w") as f:  
    f.write("Python is a high level language developed by Guido Van Rossum in  
    with open("medge.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("Uppercase letters:", upper - count)

print("lowercase letters:", lower - count)

print("Digits:", digit - count)

print(f"UPPER - count {upper - count}, lower - count {lower - count}, digit - count {digit - count}")

output

number of times with 'Bad' is 2

"ei mitteit ja itteget edt" (find),
Omitteit. 917 = 9 mil

(9 mil) mil = mil
(mil) find

(1+9) 9992.917

"ei mitteit (bad) mitteit teit" (find) x 9 mil
(9 mil) find

"ei mitteit 917 of mitteit 917" (find)
(917+917) 917 = 7

(7) find

(917+917)

Ex Counting code

Count a letter by giving name ie. message
if it is not present count it as 0 at first
Output

Name : Alice, Department : HR

Name : Bob, Department : Engineering

Name : Charlie Department : Finance

✓

Abbe - count = 0

Jome - count = 0

Gibti - count = 0

File copy in fast

File copy in nuke()

Abbe - count += 1

File copy in Jome()

Jome - count += 1

File copy in Gibti()

Gibti - count += 1

Point("Abbe" , Abbe - count); Point("Jome" , Jome - count); Point("Gibti" , Gibti - count)

Point("Abbe" , Abbe - count); Point("Jome" , Jome - count); Point("Gibti" , Gibti - count)

Construct a Python program to read the above table of student grades from a text file calculate average grade for each student and print out the result as students name along with their average grade using another text file

Program:

with open("grades.txt", "r") as f:

lines = f.readlines()

m = int(lines[0].strip())

weights = lines[1].strip().split()

weights = [float(w) for w in weights]

student = []

for i in range(2, 2+m):

parts = lines[i].strip().split()

Name = parts[0]

marks = [int(m) for m in parts[1:]]

total = 0

for j in range(4):

total = total + marks[j] * weights[j]

student.append((name, round(total, 2)))

with open("result.txt", "w") as f:

for name, avg in student:

f.write(name + " -> " + str(avg) + "\n")

Print("Average grades have been written to results.txt")