Program No.: 10

**Aim:**

Create an application to copy content from one file to another file.

**Topics covered:**

Files and File Operations.

**Course Outcome**

CO3 : Implement handling exceptions and files.

**Case Studies:**

***Case Study 01:***

***Problem Statement:***

Python program to count number of characters, words, lines in a file.

***Problem Solution:***

1. Open. A file using open() method in read mode.

2. Take 3 variables cc=0, wc=0, lc=0.

3. For each line in file, increment wc by 1.

3.1. For each character in line increment cc by 1 .If character is a space increment wc by 1.

2. Increment lc by 1 and decrement cc by 1.

4. Increment cc by 1.

5. Print cc, lc, wc.

6. Stop.

***Program/Source Code:***

Python script to count the number of words and lines and characters in a file.

"""

Case Study : 01

File Name : Cs01.py

Topics : FILE HANDLING IN PYTHON

"""

file=open("python.txt",'r')

w=0

c=0

l=0

for i in file:

l=l+1

for j in i:

if j=="" or j=="\n":

w=w+1

else:

c=c+1

w=w+1

file.close()

print ("The number of words in the file are ",w)

print ("The number of characters in the file are ",c)

print ("The number of lines in the file is/are ",l)

***Program Explanation:***

1. Open. A file using open() method in read mode.

2. Take 3 variables cc=0, wc=0, lc=0.

3. For each line in file, increment wc by 1.

3.1. For each character in line increment cc by 1 .If character is a space increment wc by 1.

2. Increment lc by 1 and decrement cc by 1.

4. Increment cc by 1.

5. Print cc, lc, wc.

6. Stop.

***Runtime Test Cases:***

1.

Harry Potter is my favourite novel.

It has 8 books.

It has 7 movies.

Word count is 14

Character count is 67

Line count is 3

2.

Harry Potter is my favourite novel.

It has 8 books.

It has 7 movies.

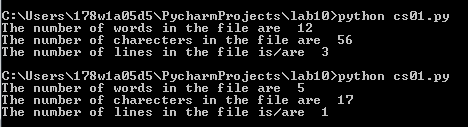
Hahahaaha.

Word count is 15

Character count is 68

Line count is 4

**Output:**



***CaseStudy 02:***

***Problem Statement:***

Python program to print the largest score in a file.

***Problem Solution:***

1. Open. A file using open() method in read mode.

2. Use split method to divide the strings in file. Take j=0.

3. For each line in the above formed list, take a1=0

3.1. For each character in above strings do ,a1 = a1 \* 10 + (ord(i) - 48) to change the string in character format to integer number.

3.2.Put the above value in the exact position as of the original string in the list.

4. Print the maximum number in the above list using max() function.

5. Stop.

***Program/Source Code:***

Python script to count the number of words and lines and charecters in a file

"""

Case Study : 02

File Name : Cs2.py

Topics : FILE HANDLING IN PYTHON

"""

#opening file

file=open("game.txt","r")

max=0

for i in file:

a=int(i)

if a>max:

max=a

print"The highest score among the given scores in the file is ",max

***Program Explanation:***

1. Open. A file using open() method in read mode.

2. Use split method to divide the strings in file. Take j=0.

3. For each line in the above formed list, take a1=0

3.1. For each character in above strings do ,a1 = a1 \* 10 + (ord(i) - 48) to change the string in character format to integer number.

3.2.Put the above value in the exact position as of the original string in the list.

4. Print the maximum number in the above list using max() function.

5. Stop.

***Runtime Test Cases:***

1.

57192

4948

55854

84

95

430

5502134

65816

123455

0

Maximum score is 55021305

Your file is closed

2.

57192

4948

55854

84

95

430

65816

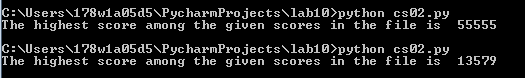
123455

0

Maximum score is 1234515

Your file is closed

**Output:**



**Result:**

Creating an application to copying content from one file to another file is done successfully.