Python Lab session 10 (12-03-2021)

File-Handling Assignment

Name :- Purushottam Kumar

ID :- 2041

MCA I-Sem (R)

Submission Date :- 12-Mar-2021

1. Write a program that reads text from a file and writes it into another file but in the reverse order.

```
File  Edit  Format  Run  Options  Window  Help

# <Prog_No:1> <Ex_No:10> <Author: Purushottam Kumar>

print("\nOutput of Prog_No:1 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

f1 = open("H:\File1.txt", "w")
f2 = open("H:\PkFile.txt","r")
data1 = f2.read()
data2 = data1[::-1]
f1.write(data2)
f2.close()
f1.close()
f2 = open("H:\PkFile.txt","r")
print("File 1 Data : \n",f2.read())
f1 = open("H:\File1.txt", "r")
print("File 2 Data : \n",f1.read())
f2.close()
f1.close()
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\1.py

Output of Prog_No:1 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

File 1 Data :
 Hello, My Name is PURUSHOTTAM KUMAR

File 2 Data :

 RAMUK MATTOHSURUP si emaN yM ,olleH
>>>
```

2. Write a program that reads a file and prints only those lines that has the word 'The'.

```python
# <Prog_No:2> <Ex_No:10> <Author: Purushottam Kumar>

print("\n Output of Prog_No:2 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

f2 = open("H:\PkFile.txt","r")
data = f2.readlines()
print("<---- All Lines ----->\n")
for line in data:
    print("Line : ",line)
f2.close()
print("<----- Lines with 'THE' ------>\n")
f2 = open("H:\PkFile.txt","r")
for line in data:
    if 'the' in line:
        print("Line : ",line)
f2.close()
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\2.py

 Output of Prog_No:2 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

<---- All Lines ----->

Line :   the Quick Brown fox jump.

Line :   My name is Purushttam Kumar

Line :   He lives in the city

Line :   he run from the place

Line :   i live in India.

<----- Lines with 'THE' ------>

Line :   the Quick Brown fox jump.

Line :   He lives in the city

Line :   he run from the place
```

3. Write a program to read a file containing text with line numbers and
copy the line in another file without the line numbers.

```python
# <Prog_No:3> <Ex_No:10> <Author: Purushottam Kumar>

print("\n Output of Prog_No:3 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

file=open("H:\PkFile.txt","r")
file2=open("H:\\Newfile.txt","w")
for line in file.read():
    file2.write(line[2:])
file2.close()
file.close()
file=open("H:\PkFile.txt","r")
print("File 1 \n",file.read())
file2=open("H:\\Newfile.txt","r")
print("File 2 ",file.read())
file.close()
file2.close()
```

OUTPUT

4. Write a program to compare two files.

```python
# <Prog_No:4> <Ex_No:10> <Author: Purushottam Kumar>

print("\nOutput of Prog_No:4 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

f1 = open("H:\PkFile.txt", "r")
f2 = open("H:\File1.txt", "r")
i = 0
for line1 in f1:
    i = i + 1
    for line2 in f2:
        if line1 == line2:
            print("Line ", i, ": SAME")
        else:
            print("Line ", i, ": NOT SAME")
            print("\tFile 1:", line1, end='')
            print("\tFile 2:", line2, end='')
        break
f1.close()
f2.close()
```

PkFile.txt - Notepad

File Edit Format View Help

the Quick Brown fox jump.
My name is Purushttam Kumar
He lives in the city
he run from the place
i live in India.

File1.txt - Notepad

File Edit Format View Help

the Quick Brown fox jump.
My name is Purushttam Kumar
He lives in the Buxar
he run from the place
i live in Patna.

OUTPUT

```
Output of Prog_No:4 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

    Line  1 : SAME
    Line  2 : SAME
    Line  3 : NOT SAME
            File 1: He lives in the city
            File 2: He lives in the Buxar
    Line  4 : SAME
    Line  5 : NOT SAME
            File 1: i live in India.
            File 2: i live in Patna.
>>>
```

5. Write a program to copy one file into another. Copy character by character.

```python
# <Prog_No:5> <Ex_No:10> <Author: Purushottam Kumar>

print("\n Output of Prog_No:5 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

file1 = open("H:\PkFile.txt","r")
file2 = open("H:\\Newfile.txt","w+")
print("<----- BEFORE COPY ----->")
print("File 1 : \n",file1.read())
print("File 2 : \n",file2.read())
file1 = open("H:\PkFile.txt","r")
file2 = open("H:\\Newfile.txt","a")
while True:
    char = file1.read(1)
    if char:
        file2.write(char)
    else:
        break
print("<----- AFTER COPY ----->")
file1 = open("H:\PkFile.txt","r")
file2 = open("H:\\Newfile.txt","r")
print("File 1 : \n",file1.read())
print("File 2 : \n",file2.read())
file2.close()
file1.close()
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\5.py

 Output of Prog_No:5 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

<----- BEFORE COPY ----->
File 1 :
 My name is Purushttam Kumar

File 2 :

<----- AFTER COPY ----->
File 1 :
 My name is Purushttam Kumar

File 2 :
 My name is Purushttam Kumar
```

6.Write a program to read and write the details of a student in a file.

```python
# <Prog_No:6> <Ex_No:10> <Author: Purushottam Kumar>

print("\n Output of Prog_No:6 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

file1=open("H:\PkFile.txt","r+")
ch=input("Enter Student Name : ")
file1.write("Name : "+ ch)
ch=input("Enter Class : ")
file1.write("\nClass : "+ ch)
ch=input("Enter Roll : ")
file1.write("\nRoll no : "+ch)
ch=input("Total marks : ")
file1.write("\nTotal Marks : "+ch)
ch=input("Obtained Marks : ")
file1.write("\nObtained Marks : "+ch)
file1.close()
file1=open("H:\PkFile.txt","r")
print(file1.readlines())
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\6.py =========

 Output of Prog_No:6 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

Enter Student Name : Purushottam
Enter Class : 10
Enter Roll : 26
Total marks : 100
Obtained Marks : 95
['Name : Purushottam\n', 'Class : 10\n', 'Roll no : 26\n', 'Total Marks : 100\n'
, 'Obtained Marks : 95']
>>>
```

7. Write a program to count the number of records stored in file named "Employee".

```
# <Prog_No:7> <Ex_No:10> <Author: Purushottam Kumar>

print("\nOutput of Prog_No:7 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

f1 = open("H:\Employee.txt","r")
Count = 0
for line in f1:
    Count += 1
    print("Record ",Count,":",line)
print("\nTotal Records : ",Count)
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\7.py

Output of Prog_No:7 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

Record  1 : the Quick Brown fox jump.

Record  2 : My name is Purushttam Kumar

Record  3 : He lives in the Buxar

Record  4 : he run from the place

Record  5 : i live in Patna.

Total Records :  5
```

8. Write a program that reads a file and prints the number of lines in that file.

```python
# <Prog_No:9> <Ex_No:10> <Author: Purushottam Kumar>

print("\nOutput of Prog_No:9 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

f1 = open("H:\Employee.txt","r")
Count = 0
for line in f1:
    Count += 1
    print("Line ",Count,":",line)
print("\nTotal Lines : ",Count)
```

OUTPUT

```
========= RESTART: H:\#MCA Assignment\Python Assignments\12 March\9.py

Output of Prog_No:9 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

Line  1 : Ram

Line  2 : Shyam

Line  3 : Mohan

Line  4 : Sita

Total Lines :  4
>>>
```

9. Write a program that reads a file and prints the number of characters, special symbols, digits and words. Also write the words in another file in new line.

```python
# <Prog_No:10> <Ex_No:10> <Author: Purushottam Kumar>

print("\nOutput of Prog_No:10 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :\n")

alphabet=0
number=0
symbol=0
file1 = open("H:\PkFile.txt","r")
while True:
    char = file1.read(1)
    if not char:
        break
    if (char>='a' and char<='z')or (char>='A' and char <='Z'):
        alphabet+=1
    elif(char>='0' and char<='9'):
        number+=1
    else:
        symbol+=1
file1.close()
file2 = open("H:\\Newfile.txt","w")
file = open("H:\PkFile.txt","rt")
data = file.read()
words = data.split()
for i in words:
    ch=i+"\n"
    file2.write(i+"\n")
file.close()
file2.close()

file1 = open("H:\PkFile.txt","r")
file2 = open("H:\\Newfile.txt","r")
print("File 1 Content : ",file1.read())
print('Total Words :', len(words)," Alphabet : ",alphabet," Number : ",number," Symbol : ",symbol)
print("\nFile 2 Content : \n",file2.read())
file2.close()
file1.close()
```

OUTPUT

```
======== RESTART: H:\#MCA Assignment\Python Assignments\12 March\10.py

Output of Prog_No:10 in Ex_No:10 implemented by PURUSHOTTAM KUMAR :

File 1 Content :  My #name is $Purushottam Kumar 12 @

Total Words : 7  Alphabet :  24  Number :  2  Symbol :  10

File 2 Content :
 My
#name
is
$Purushottam
Kumar
12
@
```