Python Practical (208) – Assignment-8

'''

Q.1. Write a Python program to create a text file of multiple lines. Display the following:

1. Line number and number of words in each line.

2. Display each line with the words in backward order.

3. Display line numbers of the empty lines.

4. Display all the lines that contain alphabets and digits both.

5. Display all the lines that contain only alphabets.

'''

```
# write to file

f = open("p1f1.txt","a")

while True:
    text = input()
    if text.upper() == "END":
        break
    f.write(text.strip()+"\n")

f.close()

# read from file

f = open("p1f1.txt","r")
for i in f:
    print(i.strip())

# line number and number of words
print("Line number and number of words in each line.\n")
f = open("p1f1.txt","r")
count = 0

print("count  No.of Word")
for i in f:
```

```
    count += 1
    if(len(i.strip()) == 0):
        print(count,"     ",0)
    else:
        print(count,"     ",len(i.strip().split(" ")))
```

 # Display each line with the words in backward order.

```
print("Display each line with the words in backward order.\n")
f = open("p1f1.txt","r")
count = 0

print("count  No.of Word")
for i in f:
    line = i.strip()
    line = line.split(" ")
    line = line[::-1]
    for word in line:
        print(word,end=" ")
    print()
```

#Display line numbers of the empty lines.

```
print("Display line numbers of the empty lines.\n")
f = open("p1f1.txt","r")
count = 0

for i in f:
    count += 1
    if(len(i.strip()) == 0):
        print(count)
```

#Display all the lines that contain alphabets and digits both.

```
print("Display all the lines that contain alphabets and digits both.\n")
f = open("p1f1.txt","r")
count = 0
```

```
for i in f:
    lst = i.strip().split(" ")
    if any(k.isalpha() for k in lst) and any(k.isdigit() for k in lst):
        print(i.strip())
```

#Display all the lines that contain only alphabets.

```
print("Display all the lines that contain only alphabets.\n")
f = open("p1f1.txt","r")
count = 0

for i in f:
    lst = i.strip().split(" ")
    if all(k.isalpha() for k in lst):
        print(i.strip())
```

'''

Q.2. Write a Python program to create two text files containing different words. Create a list containing words that exist in both the files.

'''

#file 1

```
f = open("p2f1.txt","w")
while True:
    text = input()
    if text.upper() == "END":
        break
    f.write(text.strip()+" ")
f.close()

f = open("p2f1.txt","r")
print(f.read())
f.close()
```

#file 2

```
f = open("p2f2.txt","w")
while True:
    text = input()
    if text.upper() == "END":
        break
    f.write(text.strip()+" ")
f.close()

f = open("p2f2.txt","r")
print(f.read())
f.close()
```

 # read from file and convert to list

```
f = open("p2f1.txt","r")
str1 = f.read().strip()
lst1 = str1.split(" ")
print(lst1)
f.close()

f = open("p2f2.txt","r")
str2 = f.read().strip()
lst2 = str2.split(" ")
print(lst2)
f.close()
```

#convert to set to intersection

```
set1 = set(lst1)
set2 = set(lst2)

set3 = set1.intersection(set2)
lst3 = list(set3)

print(lst3)
```

'''

Q.3. Create a list of numbers. Then divide the list into 3 parts and reverse each part. Display all the parts.

'''

```
import math

lst = []

while True:
    val = int(input("Enter Number : "))
    if val == 0:
        break
    lst.append(val)


#Divide in 3 part

if(len(lst) < 3):
    print("can't divide in 3 part..because less that 3 elements....")
    exit()
else:
    div = math.ceil(len(lst)/3)
    #div = (len(lst)//3)
    lst1 = lst[0:div]
    lst2 = lst[div:div+div]
    lst3 = lst[div+div:]

print(lst1)
print(lst2)
print(lst3)


#Reverse Each Part

lst1 = lst1[::-1]
```

```
lst2 = lst2[::-1]
lst3 = lst3[::-1]

print(lst1)
print(lst2)
print(lst3)
```