In [4]:
```
file = open("C:\\Users\\Aravind Anirudh\\Desktop\\LOG.TXT","r")
count=0
data=file.read()
c_list=data.split("\n")
for i in c_list:
    if i:
        count+=1
print("number of lines is",count)
```

```
number of lines is 20
```

In [8]:
```
#copying data from one file to another
with open(r"C:\Users\Aravind Anirudh\Desktop\LOG2.TXT","a") as file1:
    with open(r"C:\Users\Aravind Anirudh\Desktop\LOG.TXT","r") as file2:
        data=file2.read()
        c_list=data.split("\t")
        file1.write("\n")
        file1.writelines(data)
with open(r"C:\Users\Aravind Anirudh\Desktop\LOG2.TXT","r") as file1:
    print(file1.read())
```

```
16,18:27:20,31.75,31.30,58.00
16,18:27:30,31.75,31.20,57.00
16,18:27:40,32.00,31.30,58.00
16,18:28:10,32.25,31.40,58.00
16,18:28:20,32.25,31.50,57.00
16,18:28:30,33.25,31.50,56.00
16,18:28:40,33.25,31.60,56.00
16,18:28:50,32.65,31.60,55.00
16,18:29:10,33.05,31.00,55.00
16,18:29:20,33.00.31.70,56.00
16,18:29:30,32.10.32.00,57.00
16,18:29:40,31.10.32.00,57.00
16,18:29:50,32.20.31.10,56.00
16,18:30:10,31.20.32.20,58.00
16,18:30:20,33.50.31.80,56.00
16,18:30:30,32.40.33.50,60.00
16,18:30:40,31.30.33.30,57.00
16,18:30:40,32.80.33.80,70.00
16,18:30:50,33.60.32.20,80.00
16,18:31:10,32.60.31.70,83.00
```

In [10]:
```
#counting vowels and consonant in file
file =open (r"C:\Users\Aravind Anirudh\Desktop\example.txt","r")
v=set("AEIOUaeiou")
cons=("bcdfghjklmnpqrstvwxyzBCDFGHJKLMNPQRSTVWXYZ")
vowels=0
conso=0
for c in file.read():
    if c in v:
        vowels+=1
    elif c in cons:
        conso+=1
print("vowels is:",vowels,"consonant is:",conso)
```

```
vowels is: 186 consonant is: 266
```

In [11]:
```
#reversing contents in file
file=open(r"C:\Users\Aravind Anirudh\Desktop\example.txt","r")
data=file.read()
print(data[::-1])
```

```
.derevocer ecnis evah elpoep ]4[005,151 naht eroM .shtaed ]4[005,33 yletamixorp
pa ni gnitluser ,seirotirret dna seirtnuoc 091 revo ni detroper neeb evah 91-DI
VOC fo sesac ]4[000,227 naht erom ,0202 hcraM 03 fo sA ]8[]7[.hcraM 11 no cimed
nap a sa ti dezingocer dna 0202 yraunaJ 03 no nrecnoC lanoitanretnI fo ycnegrem
E htlaeH cilbuP a eb ot kaerbtuo eht deralced )OHW( noitazinagrO htlaeH dlroW e
hT .9102 rebmeceD ni ,anihC ,iebuH ,nahuW ni deifitnedi tsrif saw kaerbtuo ehT
]6[.)2-VoC-SRAS( 2 surivanoroc emordnys yrotaripser etuca ereves yb desuac ,)91
-DIVOC( 9102 esaesid surivanoroc fo cimednap gniogno na si cimednap surivanoroc
02“€â9102 ehT
```

In [15]:
```
#printing file contents with line numbers
file=open(r"C:\Users\Aravind Anirudh\Desktop\example.txt","r")
data=file.read()
pa=1
c_list=data.split("\n")
for i in c_list:
    print(pa,i)
    pa+=1
```

```
1 The 2019â€“20 coronavirus pandemic is an ongoing pandemic of coronavirus dise
ase 2019 (COVID-19),
2  caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
3  The outbreak was first identified in Wuhan, Hubei, China, in December 2019.
4  The World Health Organization (WHO) declared the outbreak to be a Public Hea
lth Emergency of International Concern on 30 January 2020 and recognized it as
a pandemic on 11 March.
5  As of 30 March 2020, more than 722,000[4] cases of COVID-19 have been report
ed in over 190 countries and territories, resulting in approximately 33,500 dea
ths.
6  More than 151,500 people have since recovered.
```

In [4]:
```
#largest number in list
lst=[]
num=int(input("enter the number of elements:"))
for i in range(1,num+1):
    element=int(input("enter element: "))
    lst.append(element)
print("largest is:",max(lst))
```

```
enter the number of elements:5
enter element: 1
enter element: 2
enter element: 3
enter element: 4
enter element: 5
largest is: 5
```

In [6]:
```
#removing duplicates in list
lst=[]
n_lst=[]

num=int(input("enter the number of elements: "))
for i in range(1,num+1):
    element=int(input("enter element: "))
    lst.append(element)
for i in lst:
    if i not in n_lst:
        n_lst.append(i)
print (n_lst)
```

```
enter the number of elements: 5
enter element: 1
enter element: 2
enter element: 2
enter element: 3
enter element: 6
[1, 2, 3, 6]
```

In [8]:
```
#common element in lists
def common(l1, l2):
    cnt = 0
    for i in l1:
        if i in l2:
            cnt +=1
    if cnt == 1:
        return "True"

l1 = []
l2 = []

num = int(input("Enter number of elements in list1 : "))

# appending elements in list
for i in range(1, num + 1):
    ele = int(input("Enter elements: "))
    l1.append(ele)

num = int(input("Enter number of elements in list2: "))

# appending elements in list
for i in range(1, num + 1):
    ele = int(input("Enter elements: "))
    l2.append(ele)

common(l1,l2)
```

```
Enter number of elements in list1 : 4
Enter elements: 1
Enter elements: 2
Enter elements: 3
Enter elements: 4
Enter number of elements in list2: 4
Enter elements: 4
Enter elements: 5
Enter elements: 6
Enter elements: 9
```

Out[8]:
```
'True'
```

In [9]:
```
# removing even numbers from list.

def rem_even(l1):
    for i in l1:
        if(i%2 == 0):
            l1.remove(i)

    return l1

l1 = []
num = int(input("Enter number of elements in list1 : "))

# appending elements in list
for i in range(1, num + 1):
    ele = int(input("Enter elements: "))
    l1.append(ele)

rem_even(l1)
```

```
Enter number of elements in list1 : 4
Enter elements: 1
Enter elements: 2
Enter elements: 3
Enter elements: 4
```

Out[9]:
```
[1, 3]
```

In [10]:
```
# Python program to generate and print a list of first and last 5 elements
# where the values are square of numbers between 1 and 30 (both included).

def str_sqr(l):
    for i in range(1,31):
        l.append(i*i)
    return l

l = []
print("The first five elements are : ", str_sqr(l)[:5:1])
print("The last five elements are : ", str_sqr(l)[-5::1])
```

```
The first five elements are :  [1, 4, 9, 16, 25]
The last five elements are :  [676, 729, 784, 841, 900]
```

In [14]:
```
# Python program to generate all permutations of a list in Python.

def permute(lst , st, end):
    if len(lst) == 0:
        return ("Empty List!")
    elif len(lst) == 1:
        return ("Only one possible permutation, i.e ", lst, " itself!!")
    else:
        if st == end:
            return print(lst)
        else:
            for i in range(st , end+1):
                lst[st], lst[i] =  lst[i], lst[st]
                permute(lst, st+1, end)
                lst[st], lst[i] =  lst[i], lst[st]

l = []
n = int(input("Enter number of elements in list : "))

# appending elements in list
for i in range(1, n + 1):
    ele = int(input("Enter elements: "))
    l.append(ele)

permute(l, 0, n-1)
```

```
Enter number of elements in list : 3
Enter elements: 1
Enter elements: 2
Enter elements: 3
[1, 2, 3]
[1, 3, 2]
[2, 1, 3]
[2, 3, 1]
[3, 2, 1]
[3, 1, 2]
```

In [15]:
```
# Python program to append a list to the second list.

l1 = []
l2 = []
n1 = int(input("Enter number of elements in list1 : "))

for i in range(1, n1 + 1):
    ele1 = int(input("Enter elements: "))
    l1.append(ele1)

n2 = int(input("Enter number of elements in list2 : "))

for i in range(1, n2 + 1):
    ele2 = int(input("Enter elements: "))
    l2.append(ele2)

for i in l1:
    if i not in l2:
        l2.append(i)
print(l2)
```

```
Enter number of elements in list1 : 3
Enter elements: 2
Enter elements: 3
Enter elements: 1
Enter number of elements in list2 : 4
Enter elements: 2
Enter elements: 31
Enter elements: 2
Enter elements: 2
[2, 31, 2, 2, 3, 1]
```

In [17]:
```
# Python program to get the frequency of the elements in a list.

from itertools import groupby        #importing itertools library

def freq(lst):
    lst = sorted(lst, key = lambda x: int(x), reverse = False) #sorting before us
    print(lst)
    f_lst = [len(list(group)) for key, group in groupby(lst)]
    return f_lst

l = []
n = int(input("Enter number of elements in list : "))

for i in range(1, n + 1):
    ele = int(input("Enter elements: "))
    l.append(ele)

print(freq(l))
```

```
Enter number of elements in list : 4
Enter elements: 2
Enter elements: 2
Enter elements: 3
Enter elements: 1
[1, 2, 2, 3]
[1, 2, 1]
```

In [18]:
```
# Python program to find the repeated items of a tuple.

def cnt(Tp):
    count = {}
    for i in Tp:
        count[i] = count.get(i,0) +1
    print(count)

Tp = [('a', 'z'), ('b', 'w'), ('b', 'w'),
               ('a', 'z'), ('b', 'w')]

cnt(Tp)
```

```
{('a', 'z'): 2, ('b', 'w'): 3}
```

In [20]:
```
# Python program to convert a tuple to a dictionary.

def conv(tup, dic):
    dic = dict(tup)    #use of dict() method
    return dic

tp = [("sewag", 50), ("kohli", 12), ("anil", 14),
    ("Mahendra", 20), ("shreyas", 25), ("dhoni", 30)]
dt = {}
print (conv(tp, dt))
```

```
{'sewag': 50, 'kohli': 12, 'anil': 14, 'Mahendra': 20, 'shreyas': 25, 'dhoni':
30}
```

In [22]:
```
# Python program to reverse a tuple.

def rev(tp):
    new_tp = ()
    for k in reversed(tp):
        new_tp = new_tp + (k,)
    print (new_tp)

tp1 = (1, 118, 18, 13, 9, 1)
rev(tp1)
```

```
(1, 9, 13, 18, 118, 1)
```

In [23]:
```
# Python program to replace last value of tuples in a list.

def md_lv(tp):
    tp = [t[:-1] + (100,) for t in tp]     #tuple slicing
    print(tp)

tp1 = ((10,11,7),(12,13,8),(14,15,9))
md_lv(tp1)
```

```
[(10, 11, 100), (12, 13, 100), (14, 15, 100)]
```

In [25]:
```
# Python program to sort a tuple by its float element.

def Sort(tp):
    return (sorted(tp, key = lambda x: float(x[1]), reverse = True))

#using sorted() function

tp = [('maths', 50.65), ('Science', 12.44), ('physics', 14.41),
    ('kannada', 20.78), ('chemi', 25.92), ('english', 30.50)]
print(Sort(tp))
```

```
[('maths', 50.65), ('english', 30.5), ('chemi', 25.92), ('kannada', 20.78), ('p
hysics', 14.41), ('Science', 12.44)]
```

In [ ]:
```

```