python_scripting_-l1-assignments

May 20, 2020

[2]:
```
mylist = range(4)
seclist = mylist
print(seclist)
mylist.append(4)
print(seclist)
seclist = mylist[:]
print(seclist)
mylist.append(5)
print(seclist)
```

```
range(0, 4)


      ␣
↪---------------------------------------------------------------------------

       AttributeError                            Traceback (most recent call␣
↪last)

       <ipython-input-2-db00beb52bcd> in <module>
         2 seclist = mylist
         3 print(seclist)
   ----> 4 mylist.append(4)
         5 print(seclist)
         6 seclist = mylist[:]


       AttributeError: 'range' object has no attribute 'append'
```

[3]:
```
def f(n):
  for x in range(n):
    yield x**3

for x in f(6):
  print(x)
```

```
0
```

```
1
8
27
64
125
```

3. Write a program to receive a string from keybord and check if the string has two 'e' in the characters. If yes return True else False.

[4]:
```
count=0
string=input()
for i in range(len(string)-1):
  if(string[i]=="e"):
    count=count+1
if(count==2):
  print("True")
else:
  print("False")
```

```
vikash
False
```

[5]:
```
counter = 1
def dolots(count):
  global counter
  for i in (1, 2, 3):
    counter = count + i

print(dolots(4))
print(counter)
```

```
None
7
```

5. Write a code to read the data from input file called input.txt and count the number of characters per line, number of words per line and write these into output file called as output.txt

[8]:
```
words_count=0
char_count=0

file1=open("input.txt","r")
file2=open("output.txt","w")
for line in file1:
    l=1
    words=line.split()
    words_count=len(words)
    char_count=len(line)
    file2.write("line num:%d Number of words:%d Number of words %d \n"␣
 ↪%(l,words_count,char_count))
```

```
    l=l+1
```

[9]:
```
List1=[1,2,3,4,5,0]
List2=[7,4,3,2,6,5,2,1]
List3=[9,5,3,0,1]
#a) Create Maxlist by taking 2 maximum elements from each list.
List1.sort()
List2.sort()
List3.sort()
print (List1)
List5=List1[len(List1)-1],List1[len(List1)-2],List2[len(List2)-1],List2[len(List2)-2],List3[le
print (List5)
```

```
[0, 1, 2, 3, 4, 5]
(5, 4, 7, 6, 9, 5)
```

[10]:
```
#b) Find average value from all the elements of Maxlist.
sum=0
for i in range(len(List5)):
  sum=sum+List5[i]
avg=sum/len(List5)
print (avg)
```

```
6.0
```

[11]:
```
#c) Create Minlist by taking 2 minimum elements from each list.
List6=List1[0],List1[1],List2[0],List2[1],List3[0],List3[1]
print (List6)
```

```
(0, 1, 1, 2, 0, 1)
```

[12]:
```
#d) Find average value from all the elements of Maxlist.
sum=0
for i in range(len(List6)):
  sum=sum+List6[i]
avg_min=sum/len(List6)
print (avg_min)
```

```
0.8333333333333334
```

7. Write program to convert prefix/net mask to IP eg: input:16 output: 255.255.0.0

[13]:
```
from socket import inet_ntoa
from struct import pack


def DottedNetmask(mask):
    bits =  0xffffffff ^ (1 << 32 - mask)-1
```

```
    return inet_ntoa(pack('>I', bits))

mask=int(input("enter a mask"))
ip=DottedNetmask(mask)
print(ip)
```

```
enter a mask16
255.255.0.0
```

8. Create a suitable data construct to read the data from an xml document as shown below:
   Everyday Italian
   Giada De Laurentiis 2005 30.00
   Harry Potter
   J K. Rowling 2005 29.99
   Learning XML
   Erik T. Ray 2003 39.95

[14]:
```
import xml.etree.ElementTree as ET
tree = ET.parse('items.xml')
root = tree.getroot()
for child in root:
    print(child.tag,child.attrib)
    for item in child:
        print(item.tag,":",item.text)
```

```
book {'category': 'COOKING'}
title : Everyday Italian
author : Giada De Laurentiis
year : 2005
price : 30.00
book {'category': 'CHILDREN'}
title : Harry Potter
author : J K. Rowling
year : 2005
price : 29.99
book {'category': 'WEB'}
title : Learning XML
author : Erik T. Ray
year : 2003
price : 39.95
```

9. Create a suitable object type and check for file size of 0 bytes of the directory contents as shown below 02/15/2016 10:49 PM 962 switchfinal.py 02/15/2016 10:49 PM 943 switchfinal.py.bak 01/27/2016 11:46 AM 15 t.py 03/31/2016 12:39 PM 840 t1.py 01/25/2016 10:34 AM 2,407 tc1.py 02/14/2017 09:13 AM 0 teat.py 03/15/2016 05:52 PM 5 tes.py

[16]:
```
import os
my_dir = r'C:\Users\imvik\Wipro Assignment'
```

```
for f in os.listdir(my_dir):
    path = os.path.join(my_dir, f)
    if os.path.isfile(path):
        if(os.path.getsize(path)==0):
            print(f)
```

output.txt

10.Create a suitable object type to eliminate the duplicate elements

[17]:
```
list=[2,7,3,6,1,2,7]
rem_dup=set()
for i in list:
    rem_dup.add(i)
print(rem_dup)
```

```
{1, 2, 3, 6, 7}
```