ASSIGNMENT 2

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DOMAIN:DATA SCIENCE

```
#Lists
x1=[11,22,33,44,55]
a1=["raghu","sham","ravi","pooja"]
print(x1)
print(a1)
```

OUTPUT

```
[11, 22, 33, 44, 55]
['raghu', 'sham', 'ravi', 'pooja']
```

```
#using for accessing
x1=[11,22,33,44,55,66]
for i in x1:
    print(i)
```

OUTPUT

```
11
22
33
44
55
66
```

```
s1=["aa","bb",11,22,33,78.23,89.11]
for i in s1:
    print(i)
```

```
aa
bb
11
22
33
78.23
89.11
```

```
s1=["aa","bb",11,22,33,78.23,89.11]
print(s1[2])
print(s1[1])
print(s1[0])
print(s1[3])
print(s1[4])
```

```
11
bb
aa
22
33
```

```
#Use of append()
s1=['aa','bb','cc',123,456,78.93,56.77]
s2=[]
for i in s1:
   s2.append(i)
print (s2)
```

```
OUTPUT
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
```

```
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
s2=[100,200,300]
s2.append(s1)
print(s2)
```

```
OUTPUT
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
[100, 200, 300, ['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]]
```

```
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
s2=[100,200,300]
s2.extend(s1)     #THIS HELPS TO ADD AT LAST
print(s2)
```

```
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
[100, 200, 300, 'aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
```

```
#USE OF REMOVE
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
s1.remove("cc")
print(s1)
s1.remove(123)
print(s1)
```

```
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
['aa', 'bb', 123, 456, 78.93, 56.77]
['aa', 'bb', 456, 78.93, 56.77]
```

```
#USE OF POP  (CAN BE USED FOR STACK OPERATIONS)
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
print(len(s1))
s1.pop(2)
print(s1)
print(len(s1))
```

```
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
7
['aa', 'bb', 123, 456, 78.93, 56.77]
6
```

```
#DEMONSTRATION OF SLICING
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
s2=[]
```

```
['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]
[123, 456]
```

```
s2=s1[3:5]
print(s2)
```

```
s3=[]
s3=s1[3:]  #access last 3 elements
print(s3)
```

[123, 456, 78.93, 56.77]

```
s4=[]
s4=s1[:]       #to copy entire list
print(s4)
```

['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]

```
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
```

['aa', 'bb', 'cc', 123, 456, 78.93, 56.77]

```
#copy in reverse order
s2=[]
s2=s1[::-1]
print(s2)
```

[56.77, 78.93, 456, 123, 'cc', 'bb', 'aa']

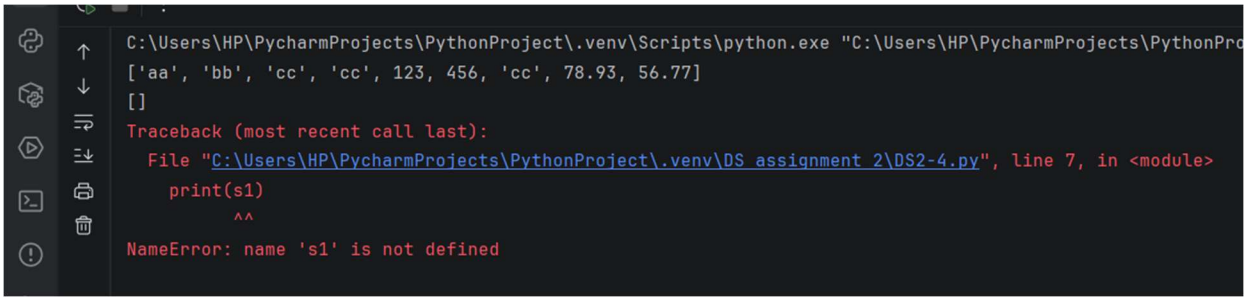
```
#use of len()
s1=['aa','bb','cc',123,456,78.93,56.77]
print(s1)
print(len(s1))
```

7

```
#use of count()
s1=['aa','bb','cc','cc',123,456,'cc',78.93,56.77]
```

2

```
print(s1)

print(s1.count('cc'))


#clear- remove full

s1=['aa','bb','cc','cc',123,456,'cc',78.93,56.77]

print(s1)

s1.clear()

print(s1)

del s1

print(s1)
```



TUPLES

```
#DEMONSTRATION OF TUPLES
t1=(11,22,33,44,55,66,77,88)
print(t1)
s1=(11,22,33,'aa','bb','cc',33,66)
print(s1)
```

(11, 22, 33, 44, 55, 66, 77, 88)

(11, 22, 33, 'aa', 'bb', 'cc', 33, 66)

```
s1=(11,22,33,'aa','bb','cc',66)
for i in s1:
    print(i)
print(s1[2])
```

11

22

33

aa

bb

cc

66

33

```
s1=(11,22,33,'aa','bb','cc',33,66)
print(s1[1:5])
```

```
(22, 33, 'aa', 'bb')
```

```
#converting Tuple to List data
s1=(11,22,33,'aa','bb','cc',33,66)
print(s1)
x1=list(s1)
print(x1)
```

```
(11, 22, 33, 'aa', 'bb', 'cc', 33, 66)
[11, 22, 33, 'aa', 'bb', 'cc', 33, 66]
```

```
#converting List data to Tuple
x1=[11,22,33,'aa','bb','cc',33,66]
print(x1)
s1=tuple(x1)
print(s1)
```

```
[11, 22, 33, 'aa', 'bb', 'cc', 33, 66]
(11, 22, 33, 'aa', 'bb', 'cc', 33, 66)
```

```
#to find the length(Number of values) of the data in Tuple
s1=(11,22,33,'aa','bb','cc',33,66)
print(len(s1))
```

```
8
```

```
#slicing a part of data from Tuple and storing it into another Tuple
s1=(11,22,33,'aa','bb','cc',33,66)
print(s1)
s2=s1[2:4]
print(s2)
```

```
(11, 22, 33, 'aa', 'bb', 'cc', 33, 66)
(33, 'aa')
```

```
#Elements sliced from 3rd element till the end:
s1=(11,22,33,'aa','bb','cc',33,66)
print(s1)
s2=s1[3:]
print(s2)
```

```
(11, 22, 33, 'aa', 'bb', 'cc', 33, 66)
('aa', 'bb', 'cc', 33, 66)
```

```
#to store & print whole TUPLE with the use of slicing operation, use [:]
s1=(11,22,33,55,88,33,66)
print(s1)
```

```
(11, 22, 33, 55, 88, 33, 66)
```

```
s2=s1[:]
print(s2)
```

```
(11, 22, 33, 55, 88, 33, 66)
```

```
s1=(11,22,33,55,88,33,66)
print(s1)
```

```
(11, 22, 33, 55, 88, 33, 66)
```

```
#PRINT IN REVERSE
s2=s1[::-1]
print(s2)
```

```
(66, 33, 88, 55, 33, 22, 11)
```

```
#counting number of occurances of data
s1=(11,22,33,55,88,33,66)
print(s1.count(33))
```

```
2
```

```
#searching  for a particular data in tuple
s1=(11,22,33,55,88,33,66)
print(s1)
x=int(input("enter data to be searched"))
for i in s1:
   if (x==i):
      print("data found")
      break
else:
   print("data not found")
```

```
(11, 22, 33, 55, 88, 33, 66)
enter data to be searched 22
data found

(11, 22, 33, 55, 88, 33, 66)
enter data to be searched2
data not found
```

```
# searching for particular data in list and print the index value of the data(use index() built in function)--in TUPLE
x=int(input("enter data to be searched"))
for i in s1:
   if (x==i):
      print("data found",s1.index(i))
      break
else:
   print("data not found")
```

```
enter data to be searched 22
data found 1

enter data to be searched 6
data not found
```