FirstPythonFile

January 7, 2021

[5]:
```
# this is comment - it will not be run
print("hello world")
```

```
hello world
```

[6]:
```
print("Another hello world from another cell")
```

```
Another hello world from another cell
```

[7]:
```
print("another cell")
```

```
another cell
```

[8]:
```
#data type
# int ,float ,char ,double ...
# int x--> x is a variable which can store int values---
```

[13]:
```
x="sarath"
```

[14]:
```
print(x)
```

```
sarath
```

[15]:
```
a=3
b=10.3
```

[16]:
```
type(a)
```

[16]: int

[17]:
```
type(b)
```

[17]: float

[18]:
```
type(x)
```

[18]: str

[19]:
```
# List ,dictionaries and tuples..
```

[20]:
```
x
```

[20]:
```
'sarath'
```

[22]:
```
x[8]
```

```
␣
↪---------------------------------------------------------------------------

        IndexError                                Traceback (most recent call␣
↪last)

        <ipython-input-22-47020b7a715b> in <module>
      ----> 1 x[8]


        IndexError: string index out of range
```

[25]:
```
x[-3]
```

[25]:
```
'a'
```

[26]:
```
#list
#define a list - []
# multiple elements - , separated
```

[38]:
```
l=[1,2.23,"sarath",4]
```

[39]:
```
l
```

[39]:
```
[1, 2.23, 'sarath', 4]
```

[29]:
```
type(l)
```

[29]:
```
list
```

[32]:
```
l[-1]
```

[32]:
```
4
```

[34]:
```
l[0]=25
```

[35]:
```
l
```

[35]:
```
[25, 2, 3, 4]
```

[36]:
```
#list data  type is mutable
```

[37]:
```
#tuple
#define ()
# , separate elements
```

[42]:
```
tup=(1,2.13,'a','sarath')
```

[43]:
```
tup
```

[43]:
```
(1, 2.13, 'a', 'sarath')
```

[44]:
```
type(tup)
```

[44]:
```
tuple
```

[46]:
```
tup[-1]
```

[46]:
```
'sarath'
```

[47]:
```
tup[0]=33
```

```
␣
↪---------------------------------------------------------------------------

       TypeError                                 Traceback (most recent call␣
↪last)

       <ipython-input-47-f5da162fc1df> in <module>
   ----> 1 tup[0]=33


       TypeError: 'tuple' object does not support item assignment
```

[48]:
```
# simple -- data type --tuple is immutable--it cant be changed
```

[49]:
```
#dictionaries
```

[50]:
```
#define   {key : value}
d={'name':'Sarath', 'prof':"teacher",'passion': "football"}
```

[51]:
```
d
```

[51]:
```
{'name': 'Sarath', 'prof': 'teacher', 'passion': 'football'}
```

[53]:
```
d['prof']
```

[53]:
```
'teacher'
```

[54]:
```
#dictionaries --
```

0.1 IN , + ,* Operators

[55]:
```
t=[1,2,3,4]
```

[56]:
```
6 in t
```

[56]: False

[57]:
```
4 in t
```

[57]: True

[58]:
```
string ="hellow"
```

[61]:
```
'hellaa' in string
```

[61]: False

[62]:
```
string + 'World'
```

[62]: 'hellowWorld'

[63]:
```
12+32
```

[63]: 44

[64]:
```
dir(t)
```

[64]:
```
['__add__',
 '__class__',
 '__contains__',
 '__delattr__',
 '__delitem__',
 '__dir__',
 '__doc__',
 '__eq__',
 '__format__',
 '__ge__',
 '__getattribute__',
 '__getitem__',
 '__gt__',
 '__hash__',
 '__iadd__',
 '__imul__',
 '__init__',
 '__init_subclass__',
```

```
 '__iter__',
 '__le__',
 '__len__',
 '__lt__',
 '__mul__',
 '__ne__',
 '__new__',
 '__reduce__',
 '__reduce_ex__',
 '__repr__',
 '__reversed__',
 '__rmul__',
 '__setattr__',
 '__setitem__',
 '__sizeof__',
 '__str__',
 '__subclasshook__',
 'append',
 'clear',
 'copy',
 'count',
 'extend',
 'index',
 'insert',
 'pop',
 'remove',
 'reverse',
 'sort']
```

[65]:
```
t.append('hello there')
```

[66]:
```
t
```

[66]:
```
[1, 2, 3, 4, 'hello there']
```

[67]:
```
t.insert(2,'i am new string')
```

[68]:
```
t
```

[68]:
```
[1, 2, 'i am new string', 3, 4, 'hello there']
```

[69]:
```
#methods -- oop concept
```

[70]:
```
#def
def myfirstfunc():
    # statements that you want to perform
    print("this is my first function in python")
```

[71]:
```
myfirstfunc()
```

```
this is my first function in python
```

[76]:
```
temp=99
```

[77]:
```
if temp <10:
    print("its cold")
    #statements

elif temp >30:
    print("its too hot")

else :
    print('its good now')
```

```
its too hot
```

[78]:
```
for  i in [ 0,1,2,3,4]:
    print(i)
```

```
0
1
2
3
4
```

[ ]:
```
#  while
```