

In [1]:

```
a = 5.5 + 1j  
# you have to mention 1j and not just j
```

In [2]:

```
type(a)
```

Out[2]:

complex

## Sequence Type

In [3]:

```
s = """Hello I am  
Deven"""  
s
```

Out[3]:

'Hello I am \nDeven'

In [4]:

```
print(s)
```

Hello I am  
Deven

## lists

In [5]:

```
l = ['python', 'language']
```

In [6]:

```
l[0][1]
```

Out[6]:

'y'

In [7]:

```
l[0][6:2:-1]
```

Out[7]:

'noh'

In [8]:

```
l2 = [10, 20, 30, 40, 50]
```

In [9]:

```
l2[4:]
```

Out[9]:

```
[50]
```

In [10]:

```
l2[:2]
```

Out[10]:

```
[10, 20]
```

In [11]:

```
l2+l2
```

Out[11]:

```
[10, 20, 30, 40, 50, 10, 20, 30, 40, 50]
```

In [12]:

```
l2 * 2
```

Out[12]:

```
[10, 20, 30, 40, 50, 10, 20, 30, 40, 50]
```

In [13]:

```
len(l2)
```

Out[13]:

```
5
```

In [14]:

```
max(l2)
```

Out[14]:

```
50
```

In [15]:

```
min(l2)
```

Out[15]:

```
10
```

## tuples

In [16]:

```
t = (1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6)
```

In [17]:

```
co = t.count(4)
```

In [18]:

```
print(co)
```

3

In [20]:

```
i = t.index(6)  
i
```

Out[20]:

5

In [21]:

```
co = t.count(6)
```

In [22]:

```
co
```

Out[22]:

4

In [23]:

```
for i in range(0, len(t)): # range(len(t))  
    if t[i] == 6:  
        print(i)
```

5  
10  
11  
12

In [25]:

```
for i, ele in enumerate(t):  
    if ele == 6:  
        print(i)
```

5  
10  
11  
12

In [26]:

```
t+t
```

Out[26]:

```
(1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6, 1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6)
```

In [27]:

```
t * 3
```

Out[27]:

```
(1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6, 1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6, 1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6, 1, 2, 3, 4, 5, 6, 7, 8, 4, 4, 6, 6, 6)
```

In [28]:

```
t[2] = 9
```

-----  
**TypeError**

Traceback (most recent call last)

~\AppData\Local\Temp\ipykernel\_15808\15375751.py in <module>

----> 1 t[2] = 9

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

## dictionary

In [29]:

```
bio = {  
    'name': 'Deven',  
    'age': 20,  
    'semester': 5,  
    'college': 'BMSCE'  
}
```

In [30]:

```
bio
```

Out[30]:

```
{'name': 'Deven', 'age': 20, 'semester': 5, 'college': 'BMSCE'}
```

In [31]:

```
print(bio.keys())
```

```
dict_keys(['name', 'age', 'semester', 'college'])
```

In [32]:

```
bio.values()
```

Out[32]:

```
dict_values(['Deven', 20, 5, 'BMSCE'])
```

In [33]:

```
for a, b in bio.items():  
    print(a, ":", b)
```

```
name : Deven
```

```
age : 20
```

```
semester : 5
```

```
college : BMSCE
```

In [35]:

```
print(type(bio))
print(bio['name'])
print(bio.get('age'))
print(bio['age'])
```

```
<class 'dict'>
Deven
20
20
```

In [36]:

```
del bio['semester']
```

In [37]:

```
for a, b in bio.items():
    print(a, ":", b)
```

```
name : Deven
age : 20
college : BMSCE
```

In [38]:

```
len(bio)
```

Out[38]:

3

In [39]:

```
str(bio)
```

Out[39]:

```
"{'name': 'Deven', 'age': 20, 'college': 'BMSCE'}"
```

## boolean

In [41]:

```
print(type(true))
```

```
-----
NameError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_15808\61652065.py in <module>
----> 1 print(type(true))
```

NameError: name 'true' is not defined

In [42]:

```
print(type(True))
```

```
<class 'bool'>
```

In [43]:

```
print(type(False))
```

```
<class 'bool'>
```

## set

In [44]:

```
s = set()
```

In [45]:

```
print(s)
```

```
set()
```

In [46]:

```
s = {"J", 2, 3, "Python"}
```

In [47]:

```
print(s)
```

```
{'J', 2, 3, 'Python'}
```

In [48]:

```
s.add(40)
```

In [49]:

```
s
```

Out[49]:

```
{2, 3, 40, 'J', 'Python'}
```

In [50]:

```
s.remove(2)
```

In [51]:

```
s
```

Out[51]:

```
{3, 40, 'J', 'Python'}
```

In [ ]: