Data Type Activity

```
In [1]:  numInt = 10
         numFloat = 6.5
         numNegative = -12.3
         numComplex = 2+3j
```

```
In [19]: print(numInt, 'is of type ', type(numInt))
         print(numFloat, 'is of type ', type(numFloat))
         print(numNegative, 'is of type ', type(numComplex))
```

```
10 is of type  <class 'int'>
6.5 is of type  <class 'float'>
-12.3 is of type  <class 'complex'>
```

```
In [20]: pyList = [6,2,9,4,3,5]
         pyDict = {'name': 'Shaukat Ishtiaq',
                   'section': 'A3'}
         pyTuple = (12, 32, 3)
         pySet = {39,33,22,142}
```

```
In [15]: print(pyList, 'is ',type(pyList) ,'with length ', len(pyList))

         print(pyDict, 'is ',type(pyDict) ,'with length ', len(pyDict))

         print(pyTuple, 'is ',type(pyTuple) ,'with length ', len(pyTuple))

         print(pySet, 'is ',type(pySet) ,'with length ', len(pySet))
```

```
[6, 2, 9, 4, 3, 5] is  <class 'list'> with length  6
{'name': 'Shaukat Ishtiaq', 'section': 'A3'} is  <class 'dict'> with length  2
(12, 32, 3) is  <class 'tuple'> with length  3
{33, 39, 142, 22} is  <class 'set'> with length  4
```

```
In [21]: pyString1 = 'captainxjacksparrow'
         pyString2 = 'aezakmi!!@what'
         pyString3 = '6273'
```

```
In [22]: print(pyString1, 'is ',type(pyString1) ,'with length ', len(pyString1))

         print(pyString2, 'is ',type(pyString2) ,'with length ', len(pyString2))

         print(pyString3, 'is ',type(pyString3) ,'with length ', len(pyString3))
```

```
captainxjacksparrow is  <class 'str'> with length  19
aezakmi!!@what is  <class 'str'> with length  14
6273 is  <class 'str'> with length  4
```

Built In Functions

```
In [4]:  print(abs(numInt))
         print(abs(numFloat))
         print(abs(numNegative))
         print(abs(numComplex))
```

```
10
6.5
12.3
3.605551275463989
```

```
In [5]:  print(len(pyList), len(pyDict), len(pyTuple), len(pySet))

         print(len(pyString1), len(pyString2))
```

```
6 2 3 4
19 14
```

```
In [6]:  print(min(pyList), min(pySet), min(pyTuple))

         print(min(pyString1), min(pyString2), min(pyString3))
```

```
2 22 3
a ! 2
```

```
In [7]:  print(max(pyList), max(pySet), max(pyTuple))

         print(max(pyString1), max(pyString2), max(pyString3))
```

```
9 142 32
x z 7
```

```
In [8]:  print(round(numFloat), round(numNegative))
```

6 -12

In [9]:

```python
print(pyString1, 'is alphamumeric: ',pyString1.isalnum())

print(pyString2, 'is alphamumeric: ',pyString2.isalnum())

print(pyString3, 'is alphamumeric: ',pyString3.isalnum())
```

```
captainxjacksparrow is alphamumeric:  True
aezakmi!!@what is alphamumeric:  False
6273 is alphamumeric:  True
```

In [10]:

```python
print(type(numInt), type(numFloat), type(numComplex), type(numNegative))

print(type(pyDict), type(pySet), type(pyTuple), type(pyList))

print(type(pyString1), type(pyString2), type(pyString3))
```

```
<class 'int'> <class 'float'> <class 'complex'> <class 'float'>
<class 'dict'> <class 'set'> <class 'tuple'> <class 'list'>
<class 'str'> <class 'str'> <class 'str'>
```

In [ ]:

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