

In [6]: *#randn function returns a random value from the normally distributed data*

In [7]: *#List starts from here*

In [8]: *#List is a horizontal bookshelf with books arranged in it. For programming language*

In [9]: *#List is ordered set of data*

In [10]: *#List can have mixed data type*

In [11]: `l=[1,2,3.4,"hello"]`

In [12]: `l`

Out[12]: `[1, 2, 3.4, 'hello']`

In [13]: *#List is a medium to store data*

In [14]: `type(l)`

Out[14]: `list`

In [15]: `l1=[55,"frq",1]`

In [16]: `l1`

Out[16]: `[55, 'frq', [1, 2, 3.4, 'hello']]`

In [19]: *range(15)#python 3,here it is generator,similar to xrange in python 2*

Out[19]: `range(0, 15)`

In [20]: `1 list[range(5)]`

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TypeError                                Traceback (most recent call last)
<ipython-input-20-82aab241a1a0> in <module>()
----> 1 list[range(5)]
```

**TypeError:** 'type' object is not subscriptable

In [22]: `l2=list(range(5))`

`##`

In [23]: `l2`

Out[23]: `[0, 1, 2, 3, 4]`

```
In [24]: e=list(range(1,20,2))
```

```
In [25]: e
```

```
Out[25]: [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]
```

```
In [27]: len(e)#to count element
```

```
Out[27]: 10
```

```
In [29]: e[-1] #negative indexcing
```

```
Out[29]: 19
```

```
In [30]: e[-10]
```

```
Out[30]: 1
```

```
In [32]: e.count(1) #to count occurence of a particular element
```

```
Out[32]: 1
```

```
In [33]: #overwrite values
```

```
In [34]: e[2]=3
```

```
In [35]: e
```

```
Out[35]: [1, 3, 3, 7, 9, 11, 13, 15, 17, 19]
```

```
In [36]: e.append(1)
```

```
In [37]: e
```

```
Out[37]: [1, 3, 3, 7, 9, 11, 13, 15, 17, 19, [1, 2, 3.4, 'hello']]
```

```
In [38]: e.extend(1)
```

```
In [39]: e
```

```
Out[39]: [1, 3, 3, 7, 9, 11, 13, 15, 17, 19, [1, 2, 3.4, 'hello'], 1, 2, 3.4, 'hello']
```

```
In [40]: #SLicing starts here
```

```
In [41]: #slicing can be defined as the cutting the elements
```

```
In [44]: e[2:8:2] #starts from index 2 uptil 8 with stepsize of 2
```

```
Out[44]: [3, 9, 13]
```

In [47]: `e[-1:-10:-2]`

Out[47]: `['hello', 2, [1, 2, 3.4, 'hello'], 17, 13]`

In [ ]: