## Data science in python

# these are list in basic of variables and dictionaries......

```
In [1]: print('hello embrizon technologies...')
    hello embrizon technologies...

In [2]: import os
    print(os.getcwd())
        C:\Users\ACER

In [3]: x = "leaving my side"
    print(x)
        leaving my side

In [4]: x

Out[4]: 'leaving my side'
```

```
In [5]: dir()
 Out[5]: ['In',
            'Out',
              _builtin__',
_builtins__',
              _doc__',
              _loader__',
              _name__',
              _package_
              _spec__',
             _dh',
            '_i',
             _i1',
            '_i2',
            '_i3',
            _
'_i4',
            '_i5',
            _
'_ih',
            '_ii',
           _
'_iii',
           _oh',
           'exit',
            'get_ipython',
           'os',
           'quit',
           'x']
 In [9]: list_1 = ['string item',100]
          list_a = list()
          print(list_1)
          type(list_1)
          ['string item', 100]
 Out[9]: list
          add element
In [10]: |list_1.append('new element')
          print(list_1)
          type(list_1)
          ['string item', 100, 'new element']
Out[10]: list
```

#### change element

In [16]: |print(list\_1[0:3])

print(list\_1[2:])

[['this', 'is', 'a', 'list']]

```
In [11]: list_1[1]='Changed Item'
         print(list 1)
         ['string item', 'Changed Item', 100, 'new element']
         ['string item', 'Changed Item', 'new element']
Out[11]: ['string item', 'Changed Item', 100, 'new element']
         removing element
In [12]: list_1.pop(0)
         print(list_1)
         ['Changed Item', 'new element']
         merge list
In [13]: list_2 = ['this', 'is', 'a', 'list']
         list_1.append(list_2)
         print(list_1)
         ['Changed Item', 'new element', ['this', 'is', 'a', 'list']]
In [14]: list_3 = [1,2,3,4]
         list 4 = [5,6,7,8]
         list_3.insert(2,list_4)
         print(list 3)
         [1, 2, [5, 6, 7, 8], 3, 4]
         accessing item
In [15]: print(list_1[0])
         print(list_1[-1])
         Changed Item
         ['this', 'is', 'a', 'list']
```

['Changed Item', 'new element', ['this', 'is', 'a', 'list']]

### **Dictionaries**

```
In [17]: | dict_a = {'key_1':'value_1',
                   'key_2':'value_2'}
         dict_b = {'key_3':'value_3',
                   'key 4':'value 4'}
         list_a = [dict_a, dict_b, dict_a]
         print(list a)
         type(list_a)
         [{'key_1': 'value_1', 'key_2': 'value_2'}, {'key_3': 'value_3', 'key_4': 'val
         ue_4'}, {'key_1': 'value_1', 'key_2': 'value_2'}]
Out[17]: list
In [18]: | print(list_a[0])
         type(list_a[0])
         {'key_1': 'value_1', 'key_2': 'value_2'}
Out[18]: dict
         variables
 In [3]: a = ['1', '2', '3']
         print(a)
         ['1', '2', '3']
 In [4]: for a in a:
             print(a)
         1
         2
         3
 In [5]: type(a)
 Out[5]: str
 In [7]: x = a.count('3')
         print(x)
         1
 In [8]: print(len(a))
         1
```

```
In [9]: thislist = list(('1','2', '3'))
print(thislist)
['1', '2', '3']
```

## Done by:-

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