## DAY3

```
LIST
a=[1,2,3]
type(a)
<class 'list'>
a=[1,8,9,10]
type(a)
<class 'list'>
a=[1,4,7.8,"patna",10]
a=[1,62.5,"ankit",10,[1,2,3,"new"]]
len(a)
5
a[2]
'ankit'
a[-4]
62.5
a[2:5]
['ankit', 10, [1, 2, 3, 'new']]
a
[1, 62.5, 'ankit', 10, [1, 2, 3, 'new']]
a[2]='nielit'
a
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new']]
a.append(100)
a
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100]
a.append("ankit")
a
```

```
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit']
b=a.append(20)
b
type(b)
<class 'NoneType'>
a.append(20)
a
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit', 20, 20]
b=a
b
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit', 20, 20]
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit', 20, 20]
a.pop()
20
a
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit', 20]
a.pop()
20
a
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100, 'ankit']
a.pop()
'ankit'
[1, 62.5, 'nielit', 10, [1, 2, 3, 'new'], 100]
a.pop(1)
62.5
a
```

```
[1, 'nielit', 10, [1, 2, 3, 'new'], 100]
a.remove(10)
a
[1, 'nielit', [1, 2, 3, 'new'], 100]
a.insert(2,75.8)
a
[1, 'nielit', 75.8, [1, 2, 3, 'new'], 100]
a.reverse()
a
[100, [1, 2, 3, 'new'], 75.8, 'nielit', 1]
a=[1,2,3,'new']
a.reverse()
a
['new', 3, 2, 1]
a = [10,22,33,2,17,8,55,19,7]
a.sort()
a
[2, 7, 8, 10, 17, 19, 22, 33, 55]
a.sort(reverse=True)
a
[55, 33, 22, 19, 17, 10, 8, 7, 2]
a=['a','e','x','d','n','z','c']
a.sort()
['a', 'c', 'd', 'e', 'n', 'x', 'z']
a=[1,10.5,"ankit",[1,5,"nielit"],5,90.8]
a[3][2]
'nielit'
```

## **Dictionary**

```
a={'key1':10,'key2':20,'key3':30}
a={'key1':10,'key2':20,'key3':30}
a={'k1':10,'k2':10.5,'k3':"nielit",'k4':[1,2,3]}
a['k3']="patna"
a
{'k1': 10, 'k2': 10.5, 'k3': 'patna', 'k4': [1, 2, 3]}
a['k5']=200
a
{'k1': 10, 'k2': 10.5, 'k3': 'patna', 'k4': [1, 2, 3], 'k5': 200}
a.items()
dict_items([('k1', 10), ('k2', 10.5), ('k3', 'patna'), ('k4', [1, 2, 3]), ('k5', 200)])
a.keys()
dict_keys(['k1', 'k2', 'k3', 'k4', 'k5'])
a.values()
dict_values([10, 10.5, 'patna', [1, 2, 3], 200])
a.pop()
Traceback (most recent call last):
 File "<pyshell#64>", line 1, in <module>
  a.pop()
TypeError: pop expected at least 1 argument, got 0
a.pop('k4')
[1, 2, 3]
{'k1': 10, 'k2': 10.5, 'k3': 'patna', 'k5': 200}
```