List

- List is also one of data structure in python
- Data type
- List can be represeented as "[]" or list()
- It can allows duplicates with different data types in a list
- Slicing can be done because index values are applicable in a list
- Ordered Format values are stored in a list
- It can changes the values in a list

In [9]:

```
ds = [34,56.67,'ramu',True,'78']
print(ds,type(ds))
print(ds[4])
print(ds[2:])
print(ds[:2:])
print(ds[::-1])
print(ds[:])
```

```
[34, 56.67, 'ramu', True, '78'] <class 'list'>
78
['ramu', True, '78']
[34, 56.67]
['78', True, 'ramu', 56.67, 34]
[34, 56.67, 'ramu', True, '78']
```

In [11]:

```
for m in ds:
    print(m,type(m),end=" ")
```

```
34 <class 'int'> 56.67 <class 'float'> ramu <class 'str'> True <class 'boo
l'> 78 <class 'str'>
```

In [14]:

```
for h in range(len(ds)):
    print(ds[h],type(ds[h]),end=" ")
```

```
34 <class 'int'> 56.67 <class 'float'> ramu <class 'str'> True <class 'boo
l'> 78 <class 'str'>
```

In [15]:

```
print(dir(list()))
```

```
['__add__', '__class__', '__contains__', '__delattr__', '__delitem__', '__di
r__', '__doc__', '__eq__', '__format__', '__ge__', '__getattribute__', '__ge
titem__', '__gt__', '__hash__', '__iadd__', '__imul__', '__init__', '__init_
subclass__', '__iter__', '__le__', '__len__', '__lt__', '__mul__', '__ne__',
'__new__', '__reduce__', '__reduce_ex__', '__repr__', '__reversed__', '__rmu
l__', '__setattr__', '__setitem__', '__sizeof__', '__str__', '__subclasshook
__', 'append', 'clear', 'copy', 'count', 'extend', 'index', 'insert', 'pop',
'remove', 'reverse', 'sort']
```

In [16]:

```
roll = [12,15,17,19]
names = ['kiran','suresh','somu','kumar','prasad']
record = roll + names
print(record)
```

```
[12, 15, 17, 19, 'kiran', 'suresh', 'somu', 'kumar', 'prasad']
```

In [19]:

```
r = input().split(",")
print(r,type(r))
```

```
34,tarun,56,kiran,prasad,'67'
['34', 'tarun', '56', 'kiran', 'prasad', "'67'"] <class 'list'>
```

In [2]:

```
inp = input().split()
ro,na = [],[]
for lk in inp:
    if lk.isnumeric():
        ro.append(int(lk))
    else:
        na.append(lk)
print(ro)
```

```
34 78 somu lalitha
[34, 78]
```

In [4]:

```
print(na)
```

```
['somu', 'lalitha']
```

In [5]:

```
print(ro)
```

```
[34, 78]
```

In [7]:

```
print(na+ro)
```

```
['somu', 'lalitha', 34, 78]
```

In [14]:

```
lt = ro+na
print(lt)
ps = lt.copy()
print(ps)
ps = ps[2:]
print(ps)
print(lt,ps)
```

```
[34, 78, 'somu', 'lalitha']
[34, 78, 'somu', 'lalitha']
['somu', 'lalitha']
[34, 78, 'somu', 'lalitha'] ['somu', 'lalitha']
```

In [17]:

```
y = [45,8,45,8,90,12,4,56]
print(y.count(1))
```

```
0
```

In [72]:

```
lis1 = [45,67,78,34]
lis2 = ['67',89]
lis4 = []
print(lis1,lis2)
lis4.extend(lis1)
lis4.extend(lis2)
print(lis1)
print(lis2)
print(lis4)
```

```
[45, 67, 78, 34] ['67', 89]
[45, 67, 78, 34]
['67', 89]
[45, 67, 78, 34, '67', 89]
```

In [73]:

```
print(lis4)
print(lis4.index(34))
print(lis4)
```

```
[45, 67, 78, 34, '67', 89]
3
[45, 67, 78, 34, '67', 89]
```

In [ ]:

```

```