

```
In [2]: a=[1,2,3,'game']  
print(type(a))  
print(len(a))
```

```
<class 'list'>  
4
```

```
In [3]: print(a[2])
```

```
3
```

```
In [4]: print(a[3])
```

```
game
```

```
In [5]: b=[1.5,'ajith',5,'*']  
print(type(b))  
print(len(a))
```

```
<class 'list'>  
4
```

```
In [6]: print(b[0])
```

```
1.5
```

```
In [7]: print(b[3])
```

```
*
```

```
In [8]: c=[]  
print(type(c))
```

```
<class 'list'>
```

```
In [9]: c.append(6)  
print(c)
```

```
[6]
```

```
In [10]: keelist2=[2,3,4,5]  
print(keelist2)  
print(len(keelist2))
```

```
[2, 3, 4, 5]  
4
```

```
In [13]: keelist3=[2,"two",True]  
print(keelist3)  
print(len(keelist3))  
print(type(keelist3))
```

```
[2, 'two', True]  
3  
<class 'list'>
```

```
In [16]: poplist=[]  
poplist.append(2)  
poplist.append('comali')  
poplist.append(True)  
print(type(poplist))  
print(len(poplist))  
print(poplist)  
print(poplist[2])  
print(len(poplist[1]))
```

```
<class 'list'>  
3  
[2, 'comali', True]  
True  
6
```

```
In [17]: a=[]  
print(type(a))  
  
<class 'list'>
```

```
In [18]: print(len(a))  
  
0
```

```
In [19]: a.append('ak')  
a.append(2)  
a.append(True)  
print(a)  
  
['ak', 2, True]
```

```
In [20]: print(len(a))  
  
3
```

```
In [21]: print(a[2])  
  
True
```

```
In [22]: print(len(a[0]))  
  
2
```

```
In [24]: b=[1,2,'as']  
print(b)  
  
[1, 2, 'as']
```

```
In [25]: c=a+b  
print(c)  
  
['ak', 2, True, 1, 2, 'as']
```

```
In [26]: for i in c:  
    print(i)  
  
ak  
2  
True  
1  
2  
as
```

```
In [27]: c.insert(1,'hello')  
print(c)  
  
['ak', 'hello', 2, True, 1, 2, 'as']
```

```
In [28]: c.pop(2)  
print(c)  
  
['ak', 'hello', True, 1, 2, 'as']
```

```
In [29]: c.extend(a)  
print(a)  
  
['ak', 2, True]
```

```
In [30]: for i in range(5):  
        print(i)
```

```
0  
1  
2  
3  
4
```

```
In [32]: for i in range(5):  
        print(i*i)
```

```
0  
1  
4  
9  
16
```

```
In [34]: for i in a:  
        print(i)
```

```
ak  
2  
True
```

```
In [35]: for i in a:  
        print(i,a.index(i))
```

```
ak 0  
2 1  
True 2
```

```
In [36]: i=0  
while i<len(a):  
    print(a[i])  
    i=i+1  
print(a)
```

```
ak  
2  
True  
['ak', 2, True]
```

```
In [38]: a=[2,'hari',True]  
print(a)
```

```
[2, 'hari', True]  
  
S1={'tea','boost','milk'} print(s1)
```

```
In [39]: s2={'ak','jd','vj','milk'}  
print(s2)
```

```
{'vj', 'ak', 'jd'}
```

```
In [40]: s1={'tea','boost','milk'}  
print(s1)
```

```
{'boost', 'milk', 'tea'}
```

```
In [41]: print(s1.union(s2))
```

```
{'boost', 'tea', 'jd', 'vj', 'ak', 'milk'}
```

```
In [42]: s2.append('milk')  
print(s2)
```

```
-----  
AttributeError                                Traceback (most recent call last)  
~\AppData\Local\Temp\ipykernel_6764\3406275771.py in <module>  
----> 1 s2.append('milk')  
      2 print(s2)  
  
AttributeError: 'set' object has no attribute 'append'
```

```
In [43]: print(s1.difference(s2))  
  
{'boost', 'milk', 'tea'}
```

```
In [44]: print(s2.difference(s1))  
  
{'vj', 'ak', 'jd'}
```

```
In [46]: t1=('ak','vj','dsp')  
print(t1)  
print(type(t1))  
  
('ak', 'vj', 'dsp')  
<class 'tuple'>
```

```
In [47]: print(t1[2])  
  
dsp
```

```
In [48]: t2=(10)  
t3=(10,)  
print(type(t2))  
print(type(t3))  
  
<class 'int'>  
<class 'tuple'>
```

```
In [49]: t4=tuple(("100","lingesh","rolex"))  
print(t4)  
print(type(t4))  
  
('100', 'lingesh', 'rolex')  
<class 'tuple'>
```

```
In [ ]:
```