

```
In [1]: ls=[]  #An empty list
```

```
In [2]: type(ls)
```

```
Out[2]: list
```

```
In [3]: ls1=[2,3,4,"hi",[4,6]]  #Creating a list
```

```
In [4]: print(ls1)
```

```
[2, 3, 4, 'hi', [4, 6]]
```

```
In [5]: ls2=["ISE","CSE"]  
ls3=ls1+ls2  # List Concatenation  
print(ls3)
```

```
[2, 3, 4, 'hi', [4, 6], 'ISE', 'CSE']
```

```
In [6]: ls2=ls2*3  #List Replication ["ISE","CSE"]*3  
print(ls2)
```

```
['ISE', 'CSE', 'ISE', 'CSE', 'ISE', 'CSE']
```

```
In [7]: len(ls2)
```

```
Out[7]: 6
```

```
In [8]: ls2[4]
```

```
Out[8]: 'ISE'
```

```
In [9]: ls2[-4]
```

```
Out[9]: 'ISE'
```

```
In [10]: ls=[1,2,3]  
ls.append("hi")  
ls.append(34)  
print(ls)
```

```
[1, 2, 3, 'hi', 34]
```

```
In [11]: res=ls.append(23.4)  #append() returns None  
print(res)
```

```
None
```

```
In [12]: ls.append("heelo",45.6)
```

```
-----  
TypeError                                Traceback (most recent call la  
<ipython-input-12-1467a604d71d> in <module>  
----> 1 ls.append("heelo",45.6)
```

TypeError: append() takes exactly one argument (2 given)

```
In [13]: ls1=["heelo",45.6] #Create a list  
ls.extend(ls1) #extend() appends the elements of the list argument to  
print(ls)
```

```
[1, 2, 3, 'hi', 34, 23.4, 'heelo', 45.6]
```

```
In [14]: ls=[3,4.5,"world"]  
ls.insert(2,"hi") # Insert at index 2 after 4.5  
print(ls)
```

```
[3, 4.5, 'hi', 'world']
```

```
In [15]: ls.insert(-1,'is')  
print(ls)
```

```
[3, 4.5, 'hi', 'is', 'world']
```

```
In [16]: ls.insert(-2,34)  
print(ls)
```

```
[3, 4.5, 'hi', 34, 'is', 'world']
```

```
In [17]: spam=['a','b','c','d']  
print(spam[int('3'*2)/11])
```

```
-----  
TypeError                                Traceback (most recent call la  
<ipython-input-17-3859695216c7> in <module>  
      1 spam=['a','b','c','d']  
----> 2 print(spam[int('3'*2)/11])
```

TypeError: list indices must be integers or slices, not float

```
In [18]: '3'*2
```

Out[18]: '33'

```
In [19]: int('33')
```

```
Out[19]: 33
```

```
In [20]: 33/11
```

```
Out[20]: 3.0
```

```
In [21]: spam[3.0]
```

```
-----  
TypeError                                Traceback (most recent call la  
<ipython-input-21-a7afae461759> in <module>  
----> 1 spam[3.0]
```

```
TypeError: list indices must be integers or slices, not float
```

```
In [ ]:
```

