

```
In [1]: #What is list?
```

```
In [15]: imran1 = 'Ghost'
         imran2 = 'Dahi'
         imran3 = 'Tamator'
```

```
In [12]: list_imran = ['ghost', 'dahi', 'tmater']
          print(list_imran)
```

```
File "<ipython-input-12-db561168d849>", line 1
    list_imran = ['ghost', 'dahi', 'tmater']
```

**SyntaxError:** invalid syntax

```
In [86]: new_list = list_imran + ('hair cut', 'Beard')
          print('new_list')
```

```

NameError                                Traceback (most recent call last)
<ipython-input-86-0261622743b4> in <module>
----> 1 new_list = list_imran + ('hair cut', 'Beard')
      2 print('new_list')

```

**NameError:** name 'list\_imran' is not defined

```
In [10]: print(new_list[5])
```

```
NameError                                Traceback (most recent call last)
<ipython-input-10-094ced1b0fd6> in <module>
----> 1 print(new_list[5])
```

**NameError:** name 'new list' is not defined

```
In [16]: print(new_list[1:4:2])
```

```
NameError                                Traceback (most recent call last)
<ipython-input-16-a18efd42a461> in <module>
----> 1 print(new_list[1:4:2])
```

**NameError:** name 'new\_list' is not defined

```
In [18]: print(new_list[:4:2])
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-18-79451b18f03f> in <module>  
----> 1 print(new_list[:4:2])  
  
NameError: name 'new_list' is not defined
```

```
In [20]: new_list = list_imran + ('hair cut', 'Beard')  
print(new_list)  
#      -5      -4      -3      -2      -1  
#['gosht', 'dahi', 'tmater', 'hair cut', 'beard']
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-20-3335a7d464b0> in <module>  
----> 1 new_list = list_imran + ('hair cut', 'Beard')  
      2 print(new_list)  
      3 #      -5      -4      -3      -2      -1  
      4 #['gosht', 'dahi', 'tmater', 'hair cut', 'beard']  
  
NameError: name 'list_imran' is not defined
```

```
In [23]: print(new_list[-1:-4])
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-23-9396b09aa5f3> in <module>  
----> 1 print(new_list[-1:-4])  
  
NameError: name 'new_list' is not defined
```

```
In [26]: print(new_list[1:4])
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-26-52dc27b81ebb> in <module>  
----> 1 print(new_list[1:4])  
  
NameError: name 'new_list' is not defined
```

In [28]: `print(new_list[-2:4:1])`

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-28-60034ca0ef6c> in <module>
----> 1 print(new_list[-2:4:1])

NameError: name 'new_list' is not defined
```

In [29]: `# 0 1 2
11 = ["A", "B", "C"]
# -3 -2 -1

#list(start:end:step)
#start included
#end excluded
#step`

```
File "<ipython-input-29-b7027fb4ab5a>", line 2
    11 = ["A", "B", "C"]
        ^
SyntaxError: can't assign to literal
```

In [34]: `l1 = ["A", "B", "C"]
l1[:]
l1
l1[:]
l1[0:]
l1[-3:]
l1[0:3]`

Out[34]: ['A', 'B', 'C']

In [35]: `l1 = ["A", "B", "C"]
l1[-3:3]`

Out[35]: ['A', 'B', 'C']

In [37]: `l1 = ["A", "B", "C"]
l1[-1:-4:-1]`

Out[37]: ['C', 'B', 'A']

In [39]: `l1 = ["A", "B", "C"]
l1[-1:-4:-1]
l1[::-4]`

Out[39]: ['C']

```
In [41]: l1 = ["A", "B", "C"]
l1[-1:-4:-1]
l1[::-3]
```

```
Out[41]: ['C']
```

```
In [43]: l1 = ["A", "B", "C"]
l1[-1:-4:-1]
l1[::-1]
```

```
Out[43]: ['C', 'B', 'A']
```

```
In [46]: new_list.append('Moo dhona')
print(list)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-46-26587bbbe5bf> in <module>
----> 1 new_list.append('Moo dhona')
      2 print(list)

NameError: name 'new_list' is not defined
```

```
In [48]: new_list.append('Moo dhona')
print(new_list)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-48-1580b4b36675> in <module>
----> 1 new_list.append('Moo dhona')
      2 print(new_list)

NameError: name 'new_list' is not defined
```

```
In [50]: del new_list[6]
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-50-b97836043102> in <module>
----> 1 del new_list[6]

NameError: name 'new_list' is not defined
```

```
In [52]: new_list.remove('Moo dhona')
print(new_list)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-52-dffe727007bd> in <module>
----> 1 new_list.remove('Moo dhona')
      2 print(new_list)

NameError: name 'new_list' is not defined
```

```
In [54]: new_list.insert('3','Podina')
print(new_list)
```

```
File "<ipython-input-54-49b9cdc6d3f3>", line 1
      new_list.insert('3','Podina')
                        ^
SyntaxError: invalid syntax
```

```
In [56]: new_list[3] = 'Dhaniya'
print(new_list)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-56-1dee569c676e> in <module>
----> 1 new_list[3] = 'Dhaniya'
      2 print(new_list)

NameError: name 'new_list' is not defined
```

```
In [58]: #if a == b:
          a += b
elif a>b:
    print('H1')
```

```
File "<ipython-input-58-76fb574c3e14>", line 2
      a += b
      ^
IndentationError: unexpected indent
```

```
In [62]: person = 'KRC'
if person == 'KRC':
    print('Imran Bhai')
elif person == 'PHR':
    print('Kaan saib')
elif person == 'FSD':
    print('Mraan Khan')
elif person == 'ISB':
    print('IK <3')
else:
    print('Imran Khan Niazi')
```

Imran Bhai

```
In [64]: person = 'KRC'
if person == 'KRC':
    print('Imran Bhai')
if person == 'PHR':
    print('Kaan saib')
if person == 'FSD':
    print('Mraan Khan')
if person == 'ISB':
    print('IK <3')
else:
    print('Imran Khan Niazi')
```

Imran Bhai

Imran Khan Niazi

```
In [67]: person = 'KRC'
if person == 'KRC':
    print('Imran Bhai')
if person == 'PHR':
    print('Kaan saib')
if person == 'FSD':
    print('Mraan Khan')
if person == 'ISB':
    print('IK <3')
else:
    print('Imran Khan Niazi')
```

Imran Bhai

Imran Khan Niazi

```
In [70]: #for (int i = 10; i<=1; i--)
for i in range(1,10,3):
    print(i)
```

1

4

7

```
In [72]: #for (int i = 10; i<=1; i--)
for i in range(1,10):
    print(i)
```

```
1
2
3
4
5
6
7
8
9
```

```
In [75]: task_to_find = 'Moo Dhona'
if task_to_find == new_list[0]:
    print('Found')
elif task_to_find == new_list[1]:
    print('Found')
for task in new_list:
    #task = 'Dahi'
    if task_to_find == task:
        print('Found')
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-75-84cccb36acb9> in <module>
      1 task_to_find = 'Moo Dhona'
----> 2 if task_to_find == new_list[0]:
      3     print('Found')
      4 elif task_to_find == new_list[1]:
      5     print('Found')
```

**NameError**: name 'new\_list' is not defined

```
In [77]: #task_to_find = 'Hair cut'
for task in range(0,len(new_list)):
    #task = 0
    if 'Hair cut' == task:
        print('Found')
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-77-58f1ece84185> in <module>
      1 #task_to_find = 'Hair cut'
----> 2 for task in range(0,len(new_list)):
      3     #task = 0
      4     if 'Hair cut' == task:
      5         print('Found')
```

**NameError**: name 'new\_list' is not defined

```
In [79]: #task_to_find = 'Hair cut'
for task in range(0,len(new_list)):
    #task = 0
    if 'Hair cut' == new_list[task]:
        print('Found')
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-79-5b878e68f2fe> in <module>
      1 #task_to_find = 'Hair cut'
----> 2 for task in range(0,len(new_list)):
      3     #task = 0
      4     if 'Hair cut' == new_list[task]:
      5         print('Found')

NameError: name 'new_list' is not defined
```

```
In [81]: #task_to_find = 'Hair cut'
for task in range(0,len(new_list)):
    #task = 0
    if 'Hair cut' == new_list[1]:
        print('Found')
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-81-3beb34d941be> in <module>
      1 #task_to_find = 'Hair cut'
----> 2 for task in range(0,len(new_list)):
      3     #task = 0
      4     if 'Hair cut' == new_list[1]:
      5         print('Found')

NameError: name 'new_list' is not defined
```

```
In [83]: len(new_list)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-83-32bfa6056044> in <module>
----> 1 len(new_list)

NameError: name 'new_list' is not defined
```



```
In [85]: #task_to_find = 'Hair cut'
for task in range(0,len(new_list)):
    #task = 0
    if 'Hair cut' == new_list[task]:
        print('Found' + str(task))
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-85-ed63c5a2671b> in <module>
      1 #task_to_find = 'Hair cut'
----> 2 for task in range(0,len(new_list)):
      3     #task = 0
      4     if 'Hair cut' == new_list[task]:
      5         print('Found' + str(task))

NameError: name 'new_list' is not defined
```

```
In [88]: new_list = list_imran + ('hair cut', 'Beard')
print('new_list')
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-88-0261622743b4> in <module>
----> 1 new_list = list_imran + ('hair cut', 'Beard')
      2 print('new_list')

NameError: name 'list_imran' is not defined
```

```
In [90]: #for (int i = 10; i<=1; i++)
for i in range(1,10):
    print(i)
```

```
1
2
3
4
5
6
7
8
9
```

```
In [92]: #for (int i = 10; i<=1; i++)
if in range(1,10):
    print(i)
```

```
File "<ipython-input-92-43656d473896>", line 2
    if in range(1,10):
        ^
SyntaxError: invalid syntax
```

```
In [97]: #if a == b:
         a += b
     elif a>b:
         print('a +=b')

File "<ipython-input-97-2042ddb36e19>", line 2
    a += b
    ^
IndentationError: unexpected indent
```

```
In [99]: a = 5
         if a>0:
             print('positive')
         elif a<0
             print('negative')

File "<ipython-input-99-95c7d7237a5b>", line 4
    elif a<0
    ^
SyntaxError: invalid syntax
```

```
In [101]: a = 5
         if a > 0:
             print('positive')
         elif a < 0:
             print('negative')

positive
```

```
In [104]: subject1=50
         subject2=60
         subject3=70
         subject4=80
         subject5=90
         Average = (Subject1+subject2+subject3+subject4:subject5)/6
         print(average)
         if average > 80
         print('grade A')
         else
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-104-88320fb2f87c> in <module>
      4 subject4=80
      5 subject5=90
----> 6 print(average)

NameError: name 'average' is not defined
```

