In [1]:
```python
word = 'abcde'
```

In [2]:
```python
for item in word:
    print(word)
```
```
abcde
abcde
abcde
abcde
abcde
```

In [3]:
```python
indexcount = 0
```

In [6]:
```python
print(indexcount)
```
```
0
```

In [3]:
```python
indexcount = 0
word = "abcde"
for letter in enumerate (word):
    print (letter)
    indexcount += 1
```
```
(0, 'a')
(1, 'b')
(2, 'c')
(3, 'd')
(4, 'e')
```

In [32]:
```python
word = "abcde"
```

In [30]:
```python
for index in enumerate(word):
    print(word)
```
```
abcdef
abcdef
abcdef
abcdef
abcdef
abcdef
```

In [36]:
```python
indexcount += 0
```

In [14]:
```python
word = "abcde"
for item,value in enumerate(word):
    print(item)
    print(value)
    print('\n')
```

```
0
a


1
b


2
c


3
d


4
e
```

In [17]:
```python
mylist1 = [1,2,3]
mylist2 = ['a', 'b','c']
```

In [20]:
```python
for item in zip(mylist1,mylist2):
    print(item)
```

```
(1, 'a')
(2, 'b')
(3, 'c')
```

In [21]:
```python
list(zip(mylist1,mylist2))
```

Out[21]: [(1, 'a'), (2, 'b'), (3, 'c')]

In [28]:
```python
"a" in [1,'a', 23]
```

Out[28]: True

In [31]:
```python
"nani" in ["nithin" , "nani"]
```

Out[31]: True

In [36]:
```python
mylist= [1,2,3,4,5,6,7,8,9]
```

```
In [34]:   1  from random import shuffle
```

```
In [37]:   1  shuffle(mylist)
```

```
In [38]:   1  mylist
```

Out[38]: [2, 3, 5, 8, 7, 4, 9, 1, 6]

```
In [49]:   1  from random import randint
           2
           3
```

```
In [48]:   1      randint(10,100)
           2
```

Out[48]: 74

```
In [51]:   1  result = input('enter a number :')
```

enter a number :22

```
In [52]:   1  float(result)
```

Out[52]: 22.0

```
In [53]:   1  int(result)
```

Out[53]: 22

```
In [56]:   1  str(result)
```

Out[56]: '22'

```
In [57]:   1  type(result)
```

Out[57]: str

```
In [58]:   1  mylist = ["hello"]
```

In [1]:
```python
1  for item in mylist:
2      mylist.append(item)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-1-88cc767a9d04> in <module>
----> 1 for item in mylist:
      2     mylist.append(item)

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

In [6]:
```python
1  mystring = "hello"
```

In [7]:
```python
1  mylist = []
2  for item in mystring:
3      mylist.append(item)
```

In [8]:
```python
1  mylist
```

Out[8]: ['h', 'e', 'l', 'l', 'o']

In [9]:
```python
1  mylist = [item for item  in mystring]
```

In [10]:
```python
1  mylist
```

Out[10]: ['h', 'e', 'l', 'l', 'o']

In [11]:
```python
1  mylist = [kinf for kinf in 'apple']
```

In [12]:
```python
1  mylist
```

Out[12]: ['a', 'p', 'p', 'l', 'e']

In [13]:
```python
1  mylist = [num**2 for num in range(0,11)]
```

In [14]:
```python
1  mylist
```

Out[14]: [0, 1, 4, 9, 16, 25, 36, 49, 64, 81, 100]

In [16]:
```python
1  from random import randint
```

In [18]:
```
1  mylist = [num for num in randint(range(1,11))]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-18-16d0020d6354> in <module>
----> 1 mylist = [num for num in randint(range(1,11))]

TypeError: randint() missing 1 required positional argument: 'b'
```

In [20]:
```
1  mylist = [num for num in range(0,11) if num%2== 0]
```

In [21]:
```
1  mylist
```

Out[21]: [0, 2, 4, 6, 8, 10]

In [24]:
```
1  celcius = [1,2,3,4,5]
2  farenheit = [(9/5 * temp + 32) for temp in celcius]
```

In [25]:
```
1  farenheit
```

Out[25]: [33.8, 35.6, 37.4, 39.2, 41.0]

In [26]:
```
1  farenheit = []
2  for temp in celcius:
3      farenheit.append(9/5 * temp + 32)
```

In [27]:
```
1  farenheit
```

Out[27]: [33.8, 35.6, 37.4, 39.2, 41.0]

In [31]:
```
1  farenheit = [item for item in celcius(9/5 * temp + 32) for temp in celcius]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-31-6d51cad62bd1> in <module>
----> 1 farenheit = [item for item in celcius(9/5 * temp + 32) for temp in celc
ius]

TypeError: 'list' object is not callable
```

In [34]:
```
1  result = [x if x%2 ==0 else "odd" for x in range(0,11)]
```

```
result
```

In [35]:
```
1  result
```

Out[35]: [0, 'odd', 2, 'odd', 4, 'odd', 6, 'odd', 8, 'odd', 10]

In [40]:
```python
mylist = [x*y for x in (0,11) for y in (11,20)]
```

In [41]:
```python
mylist
```

Out[41]: [0, 0, 121, 220]

In [ ]: