```
name = "Venky"
print(name)
print(id(name))
name += "Viky"
print(name)
print(id(name))
```

```
Venky
132597353422000
VenkyViky
132597366500208
```

```
a = 10
print(a)
print(id(a))
a += 12
print(a)
print(id(a))
```

```
10
132597782856208
22
132597782856592
```

```
s1 = "mit u rock"
s2 = "i rule mit"

if len(s1) == len(s2):
  for c1 in s1:
    for c2 in s2:
      if c1==c2:
        print("c1: -->", c1)
        print("c2: -->", c2)
        print("Gate DA")
        break
```

```
c1: --> m
c2: --> m
Gate DA
c1: --> i
c2: --> i
Gate DA
c1: --> t
c2: --> t
Gate DA
c1: -->
c2: -->
Gate DA
c1: --> u
c2: --> u
Gate DA
c1: -->
c2: -->
Gate DA
c1: --> r
c2: --> r
Gate DA
```

```
L = ["life", "anseer", 42, 0]

for v in L:
  if v==0:
    L[v] = "Venky"
  elif v==42:
    L[1] = 0
    L[3] = "Viky"

print(L)
```

```
['life', 0, 42, 'Viky']
```

```
L = ["life", "anseer", 42, 0]

for v in L:
  print(v)
  if v==0:
    L[v] = "Venky"
  elif v==42:
    L[1] = 0

print(L)
```

```
life
anseer
42
0
['Venky', 0, 42, 0]
```

```
L = '3'

print(len(L))
```

```
1
```

```
# any

any([2>8, 2>4, 1>2])
```

```
False
```

```
# all

all([8>2, 2<4, 1<2])
```

```
True
```

```
all([8>2, 2>4, 1<2])
```

```
False
```

```
any([8,3,2])
```

```
True
```

```
all(3,0.4,2)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-15-8f3357fdbd27> in <cell line: 1>()
----> 1 all(3,0.4,2)

TypeError: all() takes exactly one argument (3 given)
```

Next steps: Explain error

```
all([3,0.4,2])
```

```
True
```

```
any(["abc","12",1.2,1.4,1, ""])
```

```
True
```

```
all(["abc","12",1.2,1.4,1, ""])
```

```
False
```

```
all([])
```

```
True
```

```
any([])
```

```
False
```

```
# sum

sum(1,2,3)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-22-9abf85fcdcc3> in <cell line: 3>()
      1 # sum
      2
----> 3 sum(1,2,3)

TypeError: sum() takes at most 2 arguments (3 given)
```

Next steps: Explain error

```
sum(1,2)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-23-a91f35d5101e> in <cell line: 1>()
----> 1 sum(1,2)

TypeError: 'int' object is not iterable
```

Next steps: Explain error

```
sum([1,2,3])
```

```
6
```

```
sum([1,2,3], 4)
```

```
10
```

```
sum([1,2], 10)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-28-15e8a7e822b8> in <cell line: 1>()
----> 1 sum([1,2], [3,5])

TypeError: can only concatenate list (not "int") to list
```

Next steps: Explain error

```
sum(['1','2','3'])
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-30-f5b0a9351cb5> in <cell line: 1>()
----> 1 sum(['1','2','3'])

TypeError: unsupported operand type(s) for +: 'int' and 'str'
```

Next steps: Explain error

```
max(False, -2, -3)
```

```
False
```

```
min(False, 2, 7)
```

```
False
```

```
max(False, -2, -7, True)
```

```
True
```

```
L = ["Venky", "Viky", "Virat", "RBR", "Kohli", "Rohit"]
```

```
list(enumerate(L))
```

```
[(0, 'Venky'),
 (1, 'Viky'),
 (2, 'Virat'),
 (3, 'RBR'),
 (4, 'Kohli'),
 (5, 'Rohit')]
```

```
complex("1-2j")
```

```
(1-2j)
```

```
complex("-2j+2")
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-38-1157c5a30596> in <cell line: 1>()
----> 1 complex("-2j+2")

ValueError: complex() arg is a malformed string
```

Next steps: Explain error

```
float("1e-003")
```

```
0.001
```

```
float("2e+003")
```

```
2000.0
```

```
float()
```

```
0.0
```

```
complex()
```

```
0j
```

```
float('    -12345   \n')
```

```
-12345.0
```

```
virat = rohit
print(virat)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-45-5b64a8056294> in <cell line: 1>()
----> 1 virat = rohit
      2 print(virat)

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

Next steps: Explain error

```
x = 0b101
print(x)
```

```
5
```

```
x = 0x4f5
print(x)
```

```
1269
```

```
5*1 + 15*16 + 4*16*16
```

```
1269
```

```
x = 19023

print(x)
```

```
19023
```

```
x = 03964
```

```
  File "<ipython-input-51-df8ca423d9af>", line 1
    x = 03964
        ^
SyntaxError: leading zeros in decimal integer literals are not permitted; use an 0o
prefix for octal integers
```

Next steps: Fix error

```
x = 0o396
```

```
  File "<ipython-input-54-178dc64e4911>", line 1
    x = 0o396
            ^
SyntaxError: invalid digit '9' in octal literal
```

Next steps: Fix error

```
x
```

```
254
```

```
x = ['ab', 'cd']
for i in range(len(x)):
  print("i: -->", i)
  x.append(x[i].upper())
print(x)
```

```
i: --> 0
i: --> 1
['ab', 'cd', 'AB', 'CD']
```

```
x = ['ab', 'cd']
for i in x:
  print("i: -->", i)
  x.append(i.upper())
print(x)
```

```
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
i: --> AB
i: --> CD
ERROR:root:Internal Python error in the inspect module.
Below is the traceback from this internal error.

Traceback (most recent call last):
  File "/usr/local/lib/python3.10/dist-packages/IPython/core/interactiveshell.py",
    exec(code_obj, self.user_global_ns, self.user_ns)
  File "<ipython-input-57-1e8eeaedd534>", line 3, in <cell line: 2>
    print("i: -->", i)
  File "/usr/local/lib/python3.10/dist-packages/ipykernel/iostream.py", line 402,
    self.pub_thread.schedule(lambda : self._buffer.write(string))
  File "/usr/local/lib/python3.10/dist-packages/ipykernel/iostream.py", line 203,
    self._event_pipe.send(b'')
  File "/usr/local/lib/python3.10/dist-packages/zmq/sugar/socket.py", line 620, in
    return super().send(data, flags=flags, copy=copy, track=track)
  File "zmq/backend/cython/socket.pyx", line 746, in zmq.backend.cython.socket.Soc
  File "zmq/backend/cython/socket.pyx", line 793, in zmq.backend.cython.socket.Soc
  File "zmq/backend/cython/socket.pyx", line 250, in zmq.backend.cython.socket._se
  File "zmq/backend/cython/checkrc.pxd", line 13, in zmq.backend.cython.checkrc._c
KeyboardInterrupt

During handling of the above exception, another exception occurred:
```