```
In [5]: 15 = ['Asif', 25, [50, 100], [150, 90]]
 In [7]: 15
 Out[7]: ['Asif', 25, [50, 100], [150, 90]]
 In [9]: print(len(15))
        4
In [11]: 15.index(25)
         15
Out[11]: ['Asif', 25, [50, 100], [150, 90]]
In [19]: 15.index('Asif')
Out[19]: 0
 In [1]: 15.index([50,100])
        NameError
                                                  Traceback (most recent call last)
        Cell In[1], line 1
        ----> 1 l5.index([50,100])
        NameError: name '15' is not defined
In [29]: | 16=[30,12,{'vaishu','moonu'},{'kala','shiny'}]
Out[29]: [30, 12, {'moonu', 'vaishu'}, {'kala', 'shiny'}]
In [31]: 16.index('vaishu')
        ValueError
                                                  Traceback (most recent call last)
        Cell In[31], line 1
        ----> 1 16.index('vaishu')
        ValueError: 'vaishu' is not in list
```

LIST SLICING

```
In [34]: mylist=['one',10,'two',20]
mylist

Out[34]: ['one', 10, 'two', 20]

In [36]: mylist[:]
```

```
Out[36]: ['one', 10, 'two', 20]
In [38]: mylist[1:5]
Out[38]: [10, 'two', 20]
In [40]: mylist[:-4]
Out[40]: []
In [42]: mylist[:-3]
Out[42]: ['one']
In [50]: mylist[-4:-1]
Out[50]: ['one', 10, 'two']
In [52]: x=10
         y=20
         print(x)
                                                 Traceback (most recent call last)
        NameError
        Cell In[52], line 1
        ----> 1 x=y
              2 y=x
              3 print(x)
        NameError: name 'y' is not defined
In [56]: x=5
         y=2
         x//y
Out[56]: 2
In [58]: a='hello'
         a[1:4]
Out[58]: 'ell'
In [60]: x=[10,30,50,20]
         max(x)
Out[60]: 50
In [64]: x.len(30)
```

```
AttributeError
                                                  Traceback (most recent call last)
        Cell In[64], line 1
        ----> 1 x.len(30)
        AttributeError: 'list' object has no attribute 'len'
In [66]: 15
Out[66]: ['Asif', 25, [50, 100], [150, 90]]
In [68]: 15.len(15)
                                                  Traceback (most recent call last)
        AttributeError
        Cell In[68], line 1
        ----> 1 15.len(15)
        AttributeError: 'list' object has no attribute 'len'
In [70]: len(15)
Out[70]: 4
In [72]: x=20.3
         int(x)
Out[72]: 20
In [77]: x
Out[77]: 20.3
In [79]: isinstance(x,int)
Out[79]: False
In [81]: type(x)
Out[81]: float
In [85]: s='20'
Out[85]: '20'
In [87]: int(20)
Out[87]: 20
In [89]: python
         Copy code
         print(type({}))
```

```
Cell In[89], line 2
            Copy code
        SyntaxError: invalid syntax
In [91]: | 13=['a','b','g',1,5]
         print(13.pop())
        5
In [93]: var=2
         print(2==2.0)
        True
In [95]: num=4+0j
         print(type(num))
        <class 'complex'>
In [97]: num=3.9
         print(int(3.9))
        3
In [99]: a='python'+".py"
         а
Out[99]: 'python.py'
In [105... print(str(True),end='')
         int('4.5')
        True
        _____
        ValueError
                                                  Traceback (most recent call last)
        Cell In[105], line 2
              1 print(str(True),end='')
        ---> 2 int('4.5')
        ValueError: invalid literal for int() with base 10: '4.5'
In [113... x = 50
         def fun1():
          x = 25
          print(x)
         fun1()
         print(x)
        25
        50
In [109... x = 75
         def myfunc():
          x = x + 1
          print(x)
```

```
myfunc()
         print(x)
        UnboundLocalError
                                                  Traceback (most recent call last)
        Cell In[109], line 5
              3 \quad x = x + 1
              4 print(x)
        ---> 5 myfunc()
              6 print(x)
        Cell In[109], line 3, in myfunc()
              2 def myfunc():
        4 print(x)
        UnboundLocalError: cannot access local variable 'x' where it is not associated with
         a value
          print(type(0xFF))
In [117...
        <class 'int'>
In [129... str1 = 'Ault\\'Kelly'
         str1
          Cell In[129], line 1
            str1 = 'Ault\\'Kelly'
        SyntaxError: unterminated string literal (detected at line 1)
          str1 = """Ault'Kelly"""
In [121...
In [123... str1
Out[123... "Ault'Kelly"
In [125... str1 = 'Ault\'Kelly'
         str1
Out[125... "Ault'Kelly"
 In [ ]:
```