18th - 19th

```
In [1]: v = 5
Out[1]: 5
In [2]: | id(v)
Out[2]: 140734762003000
 In [3]: 5=v
          Cell In[3], line 1
        SyntaxError: cannot assign to literal here. Maybe you meant '==' instead of '='?
 In [4]: 1v = 9
          Cell In[4], line 1
           1v = 9
       SyntaxError: invalid decimal literal
 In [6]: 1v=9
          Cell In[6], line 1
           1v=9
        SyntaxError: invalid decimal literal
 In [8]: v1 = 9
         v1
Out[8]: 9
 In [9]: a2 = 10
         A2
        NameError
                                                  Traceback (most recent call last)
        Cell In[9], line 2
             1 a2 = 10
        ----> 2 A2
        NameError: name 'A2' is not defined
In [10]: v_0 = 7
          Cell In[10], line 1
            v@ = 7
       SyntaxError: invalid syntax
In [11]: v^* = 7
```

```
Cell In[11], line 1
       SyntaxError: invalid syntax
In [14]: v_ = 10
Out[14]: 10
In [15]: if = 78
         Cell In[15], line 1
           if = 78
        SyntaxError: invalid syntax
In [16]: else = 50
         Cell In[16], line 1
           else = 50
        SyntaxError: invalid syntax
In [17]: for = 90
          Cell In[17], line 1
          for = 90
        SyntaxError: invalid syntax
In [18]: import keyword
         keyword.kwlist
```

```
Out[18]: ['False',
           'None',
           'True',
           'and',
           'as',
           'assert',
           'async',
           'await',
           'break',
           'class',
           'continue',
           'def',
           'del',
           'elif',
           'else',
           'except',
           'finally',
           'for',
           'from',
           'global',
           'if',
           'import',
           'in',
           'is',
           'lambda',
           'nonlocal',
           'not',
           'or',
           'pass',
           'raise',
           'return',
           'try',
           'while',
           'with',
           'yield']
In [19]: len(keyword.kwlist)
Out[19]: 35
          else = 6
In [20]:
          else # else is a Reserved Keyword in Python. we cannot use keywords as var
          Cell In[20], line 1
            else = 6
       SyntaxError: invalid syntax
In [21]: Else = 6
          Else
Out[21]: 6
In [23]: for =20
          fpr
```

```
Cell In[23], line 1
           for = 20
       SyntaxError: invalid syntax
In [24]: For = 20
         For
Out[24]: 20
In [29]: prefix = 'py'
         prefix = 'thon'
         prefix
Out[29]: 'thon'
In [30]: 'py' + prefix
Out[30]: 'python'
         19th
In [31]: i = 32
         i
Out[31]: 32
In [32]: type(i)
Out[32]: int
In [33]: print(type(int))
       <class 'type'>
In [34]: f = 20.4
         f
Out[34]: 20.4
In [35]: type(f)
Out[35]: float
In [36]: f1 = 1e0
         f1
Out[36]: 1.0
In [37]: f2 = 1e1
         f2
Out[37]: 10.0
```

```
In [38]: f3 = 1e2
         f3
Out[38]: 100.0
In [39]: f4 = 1e3
         f4
Out[39]: 1000.0
In [40]: a = 10
         b = 20
In [41]: a+b
         a-b
         a*b
         a/b
Out[41]: 0.5
In [42]: print(a+b)
         print(a-b)
         print(a*b)
         print(a/b)
        30
        -10
        200
        0.5
In [43]: n1 = 10
         n2 = 20
         add = n1+n2
         print('the addition of two number',n1,'and',n2,'is =',add)
        the addition of two number 10 and 20 is = 30
In [44]: n1 = 10
         n2 = 20
         add = n1+n2
         print('the addition of {} and {} is ={}'.format(n1,n2,add))
        the addition of 10 and 20 is =30
In [45]: a = 6.7
         b = 9.0
         add = a+b
         print('the addition of {} and {} is ={}'.format(a,b,add))
        the addition of 6.7 and 9.0 is =15.7
In [46]: c = 1+2j
Out[46]: (1+2j)
In [47]: type(c)
Out[47]: complex
```

```
In [48]:
         c.real
Out[48]: 1.0
In [49]: c.imag
Out[49]: 2.0
In [51]: c = 5+10j
         d = 10 + 20j
         print(c+d)
         print(c-d)
        (15+30j)
        (-5-10j)
In [52]: def team():
             print('hello') # Python Automatically takes 4 spaces by default when we de
In [53]: b = true
        NameError
                                                  Traceback (most recent call last)
        Cell In[53], line 1
        ----> 1 b = true
              2 b
        NameError: name 'true' is not defined
In [54]: import keyword
         keyword.kwlist
```

```
Out[54]: ['False',
           'None',
           'True',
           'and',
           'as',
           'assert',
           'async',
           'await',
           'break',
           'class',
           'continue',
           'def',
           'del',
           'elif',
           'else',
           'except',
           'finally',
           'for',
           'from',
           'global',
           'if',
           'import',
           'in',
           'is',
           'lambda',
           'nonlocal',
           'not',
           'or',
           'pass',
           'raise',
           'return',
           'try',
           'while',
           'with',
           'yield']
In [55]: b = True
          b
Out[55]: True
In [56]: b1 = False
          b1
Out[56]: False
In [57]: int(True)
Out[57]: 1
In [58]: int(False)
Out[58]: 0
In [59]: True + True
Out[59]: 2
```

```
In [60]: True - False
Out[60]: 1
In [61]: False - True
Out[61]: -1
In [62]: True-True*False+False # python follows Operator precedence here
Out[62]: 1
In []:
```