16 October 2025

python intro python interpreter, compiler, ide which ide we installed how to check python version name is caled variable (variable == object == identifier) python datatype demo (who learned, what topic, placement, class,

Type Casting == convert from one data type to other datatype

```
In [1]: int(2.4)
Out[1]: 2
In [2]: int(2.4, 3.5)
       TypeError
                                                 Traceback (most recent call last)
       Cell In[2], line 1
       ---> 1 int(2.4, 3.5)
       TypeError: 'float' object cannot be interpreted as an integer
In [3]: int(True)
Out[3]: 1
In [5]: int(false)
       NameError
                                                 Traceback (most recent call last)
       Cell In[5], line 1
       ----> 1 int(false)
       NameError: name 'false' is not defined
In [6]: int(False)
Out[6]: 0
In [7]: int(True, False)
       TypeError
                                                 Traceback (most recent call last)
       Cell In[7], line 1
       ----> 1 int(True, False)
       TypeError: int() can't convert non-string with explicit base
In [8]: int('10')
```

```
Out[8]: 10
 In [9]: int('ten')
       ValueError
                                               Traceback (most recent call last)
       Cell In[9], line 1
       ----> 1 int('ten')
       ValueError: invalid literal for int() with base 10: 'ten'
In [10]: int(1+2j)
        ______
                                               Traceback (most recent call last)
       TypeError
       Cell In[10], line 1
       ----> 1 int(1+2j)
       TypeError: int() argument must be a string, a bytes-like object or a real number, no
       t 'complex'
In [11]: # all other datatype to float
        float(200000)
Out[11]: 200000.0
In [12]: float(1+2j)
       TypeError
                                               Traceback (most recent call last)
       Cell In[12], line 1
       ----> 1 float(1+2j)
       TypeError: float() argument must be a string or a real number, not 'complex'
In [13]: float(10, 20)
       TypeError
                                             Traceback (most recent call last)
       Cell In[13], line 1
       ----> 1 float(10, 20)
       TypeError: float expected at most 1 argument, got 2
In [14]: float(True)
Out[14]: 1.0
In [15]: float(False)
Out[15]: 0.0
In [16]: | float('10')
Out[16]: 10.0
```

```
In [17]: float('ten')
        ValueError
                                                  Traceback (most recent call last)
        Cell In[17], line 1
        ----> 1 float('ten')
        ValueError: could not convert string to float: 'ten'
In [18]: str(8)
Out[18]: '8'
In [19]: print(str(8.8))
        8.8
In [20]: str(8.8)
Out[20]: '8.8'
In [21]: str(1+2j)
Out[21]: '(1+2j)'
In [22]: str(True)
Out[22]: 'True'
In [23]: str()
Out[23]: ''
In [24]: str(True, False)
        TypeError
                                                  Traceback (most recent call last)
        Cell In[24], line 1
        ----> 1 str(True, False)
        TypeError: str() argument 'encoding' must be str, not bool
In [25]: bool(10)
Out[25]: True
In [26]: bool(1.5)
Out[26]: True
In [27]: bool()
Out[27]: False
```

```
In [28]: bool('10')
Out[28]: True
In [29]: bool('ten')
Out[29]: True
In [30]: bool(0)
Out[30]: False
In [31]: bool(1+2j)
Out[31]: True
In [32]: complex(10)
Out[32]: (10+0j)
In [33]: complex(10,20)
Out[33]: (10+20j)
In [34]: complex(10,20,30)
        TypeError
                                                 Traceback (most recent call last)
        Cell In[34], line 1
        ---> 1 complex(10,20,30)
        TypeError: complex() takes at most 2 arguments (3 given)
In [35]: complex(10.20, 30)
Out[35]: (10.2+30j)
In [36]: complex(10.20, 30.8)
Out[36]: (10.2+30.8j)
In [37]: complex(True)
Out[37]: (1+0j)
In [38]: complex(False)
Out[38]: 0j
In [39]: complex('10')
Out[39]: (10+0j)
```