

TYPE CASTING

```
In [1]: int(2.3) #cast from float to int
```

```
Out[1]: 2
```

```
In [6]: int(2.3,3.0)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[6], line 1  
----> 1 int(2.3,3.0)  
  
TypeError: 'float' object cannot be interpreted as an integer
```

```
In [8]: int(True) #cast from bool to int
```

```
Out[8]: 1
```

```
In [10]: int(False)
```

```
Out[10]: 0
```

```
In [12]: True
```

```
Out[12]: True
```

```
In [14]: True+True
```

```
Out[14]: 2
```

```
In [16]: True-True
```

```
Out[16]: 0
```

```
In [19]: int(1+2j) #complex is not possible
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[19], line 1  
----> 1 int(1+2j)  
  
TypeError: int() argument must be a string, a bytes-like object or a real number,  
not 'complex'
```

```
In [21]: int('10')
```

```
Out[21]: 10
```

```
In [23]: int('ten') #text string is not possible
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[23], line 1  
----> 1 int('ten')  
  
ValueError: invalid literal for int() with base 10: 'ten'
```

In [25]: float(10)

Out[25]: 10.0

In [27]: float(10,20)

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[27], line 1  
----> 1 float(10,20)  
  
TypeError: float expected at most 1 argument, got 2
```

In [29]: float(True)

Out[29]: 1.0

In [31]: float(False)

Out[31]: 0.0

In [33]: float(2+5j)

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[33], line 1  
----> 1 float(2+5j)  
  
TypeError: float() argument must be a string or a real number, not 'complex'
```

In [35]: float('10')

Out[35]: 10.0

In [37]: float('ten')

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[37], line 1  
----> 1 float('ten')  
  
ValueError: could not convert string to float: 'ten'
```

In [39]: True

Out[39]: True

In [41]: True+True

Out[41]: 2

```
In [43]: complex(10)
```

```
Out[43]: (10+0j)
```

```
In [45]: complex(10,20)
```

```
Out[45]: (10+20j)
```

```
In [47]: complex(10,20,30) #only two arguments
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[47], line 1  
----> 1 complex(10,20,30)  
  
TypeError: complex() takes at most 2 arguments (3 given)
```

```
In [49]: complex(2.5,5)
```

```
Out[49]: (2.5+5j)
```

```
In [51]: complex(True,False)
```

```
Out[51]: (1+0j)
```

```
In [53]: complex(True,True)
```

```
Out[53]: (1+1j)
```

```
In [55]: complex(False,False)
```

```
Out[55]: 0j
```

```
In [57]: complex('50')
```

```
Out[57]: (50+0j)
```

```
In [59]: complex('10','20','30')
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[59], line 1  
----> 1 complex('10','20','30')  
  
TypeError: complex() takes at most 2 arguments (3 given)
```

```
In [61]: complex('10','20','30','40')
```

```
Cell In[61], line 1  
    complex('10','20','30','40')  
                                ^  
SyntaxError: unterminated string literal (detected at line 1)
```

```
In [ ]:
```