

# Type Casting

```
In [3]: int(2.3) #cast from float to int
```

```
Out[3]: 2
```

```
In [5]: int(2.3, 3.0)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[5], line 1  
----> 1 int(2.3, 3.0)  
  
TypeError: 'float' object cannot be interpreted as an integer
```

```
In [7]: int(True) #cast from bool to int
```

```
Out[7]: 1
```

```
In [9]: int(False)
```

```
Out[9]: 0
```

```
In [11]: True
```

```
Out[11]: True
```

```
In [13]: True + True
```

```
Out[13]: 2
```

```
In [15]: int(1+2j)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[15], line 1  
----> 1 int(1+2j)  
  
TypeError: int() argument must be a string, a bytes-like object or a real number, not 'complex'
```

```
In [17]: int('10')
```

```
Out[17]: 10
```

```
In [19]: int('ten') #int cannot convert/typecast text string
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[19], line 1  
----> 1 int('ten')  
  
ValueError: invalid literal for int() with base 10: 'ten'
```

```
In [21]: float(10)
```

```
Out[21]: 10.0
```

```
In [23]: float(10, 20)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[23], line 1  
----> 1 float(10, 20)  
  
TypeError: float expected at most 1 argument, got 2
```

```
In [25]: float(True)
```

```
Out[25]: 1.0
```

```
In [27]: float(False)
```

```
Out[27]: 0.0
```

```
In [29]: float(1+2j)
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[29], line 1
----> 1 float(1+2j)

TypeError: float() argument must be a string or a real number, not 'complex'
```

```
In [31]: float('10')
```

```
Out[31]: 10.0
```

```
In [33]: float('ten') #float cannot convert/typecast text string
```

```
-----
ValueError                                Traceback (most recent call last)
Cell In[33], line 1
----> 1 float('ten')

ValueError: could not convert string to float: 'ten'
```

```
In [35]: True
```

```
Out[35]: True
```

```
In [37]: True + True
```

```
Out[37]: 2
```

```
In [39]: complex(10)
```

```
Out[39]: (10+0j)
```

```
In [41]: complex(10, 20)
```

```
Out[41]: (10+20j)
```

```
In [43]: complex(10,20,30,40,50)
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[43], line 1
----> 1 complex(10,20,30,40,50)

TypeError: complex() takes at most 2 arguments (5 given)
```

```
In [45]: complex(2.3)
```

```
Out[45]: (2.3+0j)
```

```
In [47]: complex(2.3, 4)
```

```
Out[47]: (2.3+4j)
```

```
In [49]: complex(True, True)
```

```
Out[49]: (1+1j)
```

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

```
Out[51]: 0j
```

```
In [53]: complex('10')
```

```
Out[53]: (10+0j)
```

```
In [55]: complex('10', '20')
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[55], line 1
----> 1 complex('10', '20')

TypeError: complex() can't take second arg if first is a string
```

```
In [57]: complex('ten') #Complex cannot convert/typecast text string
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[57], line 1  
----> 1 complex('ten')  
  
ValueError: complex() arg is a malformed string
```

In [ ]:

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