### type casting

## integer

```
In [2]: int(2.3)
Out[2]: 2
In [4]: int(True)
Out[4]: 1
In [6]: int('10')
Out[6]: 10
In [8]: int('ten') #conversion of aplhabetical to int string is not possible
        ValueError
                                                 Traceback (most recent call last)
        Cell In[8], line 1
        ---> 1 int('ten')
        ValueError: invalid literal for int() with base 10: 'ten'
In [10]: int(10+20j) #conversion of complex to int is not possible
                                                  Traceback (most recent call last)
        TypeError
        Cell In[10], line 1
        ----> 1 int(10+20j)
        TypeError: int() argument must be a string, a bytes-like object or a real number,
        not 'complex'
```

#### float

```
In [14]: float(20)
Out[14]: 20.0
In [16]: float(True)
Out[16]: 1.0
In [18]: float(10+20J) #casting of complex to float is not possible
```

10/30/24, 1:32 PM casting assignment

```
TypeError
Cell In[18], line 1
----> 1 float(10+20J)

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

In [20]: float('10')

Out[20]: 10.0

In [22]: float('ten') #conversion of alphabetical string to float is not possible

ValueError
Cell In[22], line 1
----> 1 float('ten')

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

### complex

```
In [25]: complex(10)
Out[25]: (10+0j)
In [27]: complex(20.7)
Out[27]: (20.7+0j)
In [29]: complex(True)
Out[29]: (1+0j)
In [31]: complex('20')
Out[31]: (20+0j)
```

#### bool

```
In [34]: bool(20)
Out[34]: True
In [36]: bool(20.8)
Out[36]: True
In [38]: bool(10+20j)
Out[38]: True
In [40]: bool('nit')
```

```
Out[40]: True
In [42]: bool()
Out[42]: False
In [44]: bool(0)
Out[44]: False
```

# string

```
In [47]: str(48)
Out[47]: '48'
In [49]: str(41.4)
Out[49]: '41.4'
In [51]: str(True)
Out[51]: 'True'
In [53]: str(10+20j)
Out[53]: '(10+20j)'
In []:
```