

# 16 OCT

- Python Introduction
- Python Interpreter, Compiler, IDE
- which IDE we installed
- how to check python version
- name is called variable
- Python datatype
- Introduction to function and function arguments

## Type casting == convert one datatypes to other datatypes

```
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 [4]: int(True)
```

```
Out[4]: 1
```

```
In [5]: int(False)
```

```
Out[5]: 0
```

```
In [7]: int('10')
```

```
Out[7]: 10
```

```
In [8]: int('hello')
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[8], line 1  
----> 1 int('hello')  
  
ValueError: invalid literal for int() with base 10: 'hello'
```

```
In [9]: int(2+5j)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[9], line 1  
----> 1 int(2+5j)  
  
TypeError: int() argument must be a string, a bytes-like object or a real number, not 'complex'
```

## All other datatypes to Float

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

```
Out[10]: 10.0
```

```
In [12]: float(True)
```

```
Out[12]: 1.0
```

```
In [14]: float(10+5j)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[14], line 1  
----> 1 float(10+5j)  
  
TypeError: float() argument must be a string or a real number, not 'complex'
```

```
In [16]: float('5')
```

```
Out[16]: 5.0
```

```
In [17]: float('hello')
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[17], line 1  
----> 1 float('hello')  
  
ValueError: could not convert string to float: 'hello'
```

```
In [18]: str(10)
```

```
Out[18]: '10'
```

```
In [19]: str(12.5)
```

```
Out[19]: '12.5'
```

```
In [20]: str(2+6j)
```

Out[20]: '(2+6j)'

In [21]: `str(True)`

Out[21]: 'True'

In [22]: `str(3,9)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[22], line 1  
----> 1 str(3,9)  
  
TypeError: str() argument 'encoding' must be str, not int
```

In [23]: `bool(10)`

Out[23]: True

In [24]: `bool(10.6)`

Out[24]: True

In [25]: `bool(0)`

Out[25]: False

In [26]: `bool('hello')`

Out[26]: True

In [27]: `bool(2,8)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[27], line 1  
----> 1 bool(2,8)  
  
TypeError: bool expected at most 1 argument, got 2
```

In [28]: `complex(10)`

Out[28]: (10+0j)

In [29]: `complex(10.4)`

Out[29]: (10.4+0j)

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

Out[30]: (10+40j)

In [31]: `complex(10,20,30)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[31], line 1  
----> 1 complex(10,20,30)  
  
TypeError: complex() takes at most 2 arguments (3 given)
```

```
In [32]: complex(10+3j)
```

```
Out[32]: (10+3j)
```

```
In [33]: complex(True, False)
```

```
Out[33]: (1+0j)
```

```
In [ ]:
```