

What are we gonna master today?

int - Used for storing integers without fractional part

float - used for storing numbers with fractional part

Complex - used for storing complex number (real & imaginary part)

Integer (Int)

both negative and positive integers

## Float

⇒ Python also support floating-point real values

⇒ Floats are value specified with decimal point.

eg. 3.14 , 2.7 , 1.5

⇒ Python float has precision of 16 digits,  
just like double data type of C/Java.

★ Float can also be represented as  
exponential value

$$1e^5 = 100\ 000 = 1 * 10^5$$

$$1e^{-3} =$$

# Complex Data Type

⇒ Complex numbers are written as below

$$\begin{array}{cc} x + yj \\ \downarrow \quad \downarrow \\ \text{real} \quad \text{imaginary} \end{array}$$

$i$  cannot be used

eg ÷  $3 + 4j$

$12 + 3j$

$3 + 9i$   
 ~~$i$~~

$$j = \text{unit imaginary number} = \sqrt{-1}$$

We can only use letter " $j$ " & not anything else.

Also it should be in suffix not prefix

$5j$

$j3$   ~~$i$~~

Real and Imaginary part can be float as well as integer.