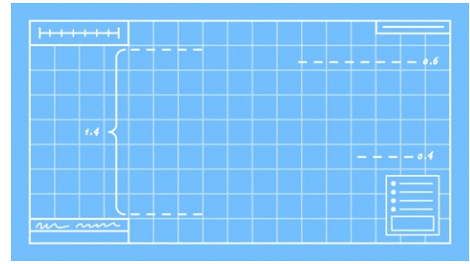


# Classes & Objects



OOPS - Object oriented Programming Style

Human / Users

- Name
- Age
- Profession

Real World

Objects



Code

---

Blueprint



Car

Layout / Plan



House

DNA



Human

# Complex Numbers

$$\begin{array}{ccc} 5 & + & 3i \\ \hline \uparrow & & \uparrow \\ \text{Real} & & \text{Imaginary} \end{array} \quad a + ib$$

## Imaginary Numbers

$$\sqrt{-5}$$

$$\sqrt{-100}$$

$$\sqrt{-12}$$

$$\sqrt{-1} = \text{iota } (i)$$

$$\sqrt{-5} = \sqrt{5} \sqrt{-1} = \sqrt{5} i$$

$$\begin{aligned} \sqrt{-100} &= \sqrt{100} \sqrt{-1} = \sqrt{100} i \\ &= 10 i \end{aligned}$$

---

$$x = 5 + 3i$$

$$y = 12 - 2i$$

Blueprint of Complex No

- Real
- Imaginary

$$\begin{array}{ccc} 5 & + & 3i \\ \downarrow & & \downarrow \\ \text{Real} & & \text{Imaginary} \end{array}$$

Imaginary

-  $3i$

---

Break

till

10:15 PM

## Slides

<https://slides.com/tarunluthra/python-oops/>

LLA Module

# Doubts

Thank  
You

$x.\text{thing}$   $\leftarrow$   $x$  is an object  
of a class

$x["\text{thing}"]$   $\leftarrow$   $x$  is a dict  
 $\{$   
     $\text{"thing": } \underline{\hspace{2cm}}$   
 $\}$

Good  
Night

Thank  
You

Friday