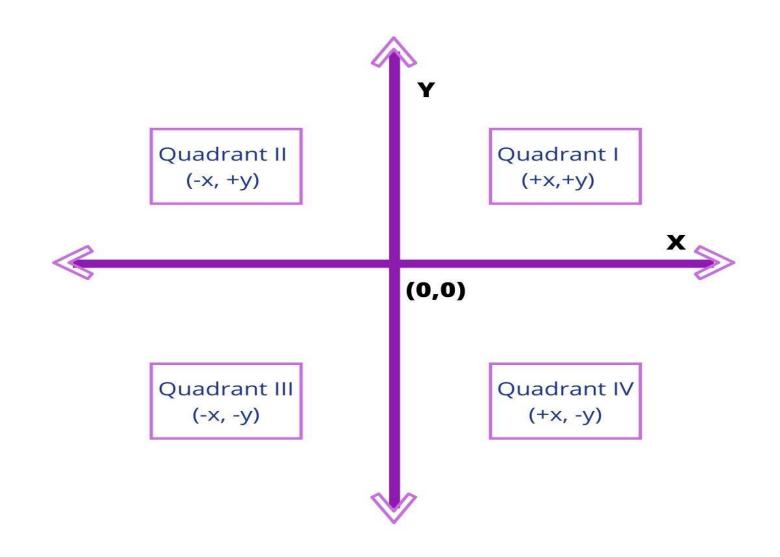


#### turtle

pip install PythonTurtle

turtle is a pre-installed Python library that enables users to create pictures and shapes by providing them with a virtual canvas. The onscreen pen that you use for drawing is called the turtle and this is what gives the library its name.

## Coordinates



# Moving the Turtle

- Forward
- Backward
- Left
- Right

## Turtle motion

- forward() | fd()
- backward() | bk() | back()
- right() | rt()
- left() | lt()
- goto() | setpos() | setposition()
- setx()
- sety()
- setheading() | seth()

```
home()
circle()
dot()
stamp()
clearstamp()
clearstamps()
undo()
speed()
```

### Turtle's state

```
position() | pos()
towards()
xcor()
ycor()
heading()
distance()
```

# Setting and measurement

- degrees()
- radians()

#### control

#### **Color control**

color()
pencolor()
fillcolor()

#### More drawing control

```
reset()
clear()
write()
```

```
Drawing state
pendown() | pd() |
down()
penup() | pu() | up()
pensize() | width()
pen()
isdown()
```