Python Turtle Reference Sheet

Move Relative

Move Absolute

Move forward

forward(100)

Move backward

backward(100)

Turn right

right(90)

Turn left

left(45)

If the pen is down when the turtle makes an absolute or relative move, a line will be drawn. Go to a point on the screen

goto(50, 50)

Set the horizontal location

setx(150)

Set the vertical location

sety(100)

Point in a certain direction

setheading(45)

Go to (0,0) and face right

home()

The Turtle

Hide the turtle

hideturtle()

Show the turtle

showturtle()

Change the turtle's shape

shape('square')

Change turtle speed to fast

speed(10)

Change turtle speed to instantaneous

speed(0)

Drawing

Put the pen down

pendown()

Pick the pen up

penup()

Set the width of the line

pensize(5)

Set the pen color

pencolor('red')

Fill shape with color

fillcolor('purple')
begin_fill()
<draw a shape>
end fill()

Stamp turtle shape

stamp()

Erase the screen

clear()

Erase the screen and send the turtle to (0.0)

reset()

Draw a dot

dot(10, 'blue')

Draw a circle

circle(100)

Draw a semi-circle

circle(100,180)

Draw a hexagon

circle(100,360,6)

The World

Set screen color

bgcolor('yellow')

Put picture in background

bgpic(<gif file>)

Set the screen size

screensize(100,200)

Set the window title

title(<string>)

Functions

Define function polygon

def polygon(size, sides):
 for i in range(sides):
 forward(size)
 right(360/sides)

Call function polygon

polygon(75, 8)

Python Libraries

Turtle Drawing

from turtle import *

Random Numbers

from random import *

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Colors

Red, green, and blue are the three primary colors of light.

The float value 0.0 represents no brightness of that color. The float value 1.0 represents full brightness of that color. So the color red is represented by the RGB color tuple (1.0, 0, 0). The color purple is half-bright red and half-bright blue, so it is represented by the RGB color tuple (0.5, 0.0, 0.5). Full brightness of red and blue makes pink: (1.0, 0.0, 1.0)

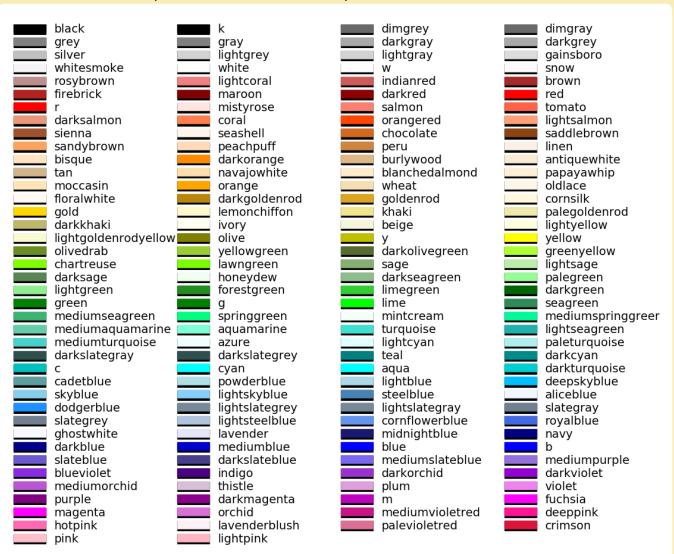
Set the pen color to green

pencolor(0.0, 1.0, 0.0)

Set the turtle color to dark gray. Note: this will change the pen color unless pen color is also set

color(0.25, 0.25, 0.25)

Colors can also be set by name. Here are some that Python understands:



Turtle Shapes

Built-in turtle shapes are: 'arrow', 'turtle', 'square', 'triangle', 'classic'. Or you can define a new shape with the register-shape function using a tuple of pairs of coordinates

register_shape('triangle', ((5,-3), (0.5), (-5,-3))