Useful functions

Input and Output

print(1, 'two')	List the values, separated by a space, on a line
print(1, 'two', end='')	List the values, but doesn't move to a new line
print(1, 'two', sep=',')	List the values, separated by comma
input('How much? ')	Asks the user for input; returns the input as a string

Type casting

str(123)	Converts any value to a string
int('123')	Converts to integer (may generate ValueError)
int(123.4)	Removing the decimal part
float('123.4')	Converts to a real number (may generate ValueError)
bool(1)	Boolean (empty string or 0: False ; other strings/numbers: True)

Random

from random import randrange, uniform

randrange(0, 10)	Random integer between 0 and 9
uniform(0, 10)	Random real number: 0 <= x <= 10

Program information

help(x)	Get help on specific object x
dir()	Overview of variable names
dir(x)	Overview of attributes (e.g. methods) of object x
type(x)	Get type of object x

Turtle

from turtle import forward, left, right, shape, penup, pendown, exitonclick

forward(n)	move forward by n pixels
left(u)	turn left by u degrees
right(u)	turn right by u degrees
shape(s)	set the shape ('arrow','turtle','circle','square',…)
penup()	stop drawing
pendown()	start drawing
exitonclick()	

Mathematics

from math import sin, cos, tan, sqrt, pi

round(x)	rounding (available as a built-in function)
floor(x)	rounding down
ceil(x)	rounding up
sqrt(x)	square root
abs(x)	absolute value
sin(u)	
cos(u)	trigonometric functions (input in radians)
tan(u)	
degrees(r)	radians in degrees
radians(d)	degrees in radians