Functions in Python Turtle Part-1

**1] forward() :**

turtle.**forward**(*distance*)

turtle.**fd**(*distance*)

|  |  |
| --- | --- |
| **Parameters:** | **distance** – a number (integer or float) |

Move the turtle forward by the specified *distance*, in the direction the turtle is headed.

**>>>** turtle.forward(25)

**2] backward() :**

turtle.**back**(*distance*)

turtle.**bk**(*distance*)

turtle.**backward**(*distance*)

|  |  |
| --- | --- |
| **Parameters:** | **distance** – a number |

Move the turtle backward by *distance*, opposite to the direction the turtle is headed. Do not change the turtle’s heading.

**>>>** turtle.backward(30)

**3] right() :**

turtle.**right**(*angle*)

turtle.**rt**(*angle*)

|  |  |
| --- | --- |
| **Parameters:** | **angle** – a number (integer or float) |

Turn turtle right by *angle* units. (Units are by default degrees, but can be set via the [degrees()](https://docs.python.org/3.3/library/turtle.html?highlight=turtle#turtle.degrees) and [radians()](https://docs.python.org/3.3/library/turtle.html?highlight=turtle#turtle.radians) functions.) Angle orientation depends on the turtle mode, see [mode()](https://docs.python.org/3.3/library/turtle.html?highlight=turtle#turtle.mode).

**>>>** turtle.right(45)

**4]left():**

turtle.**left**(*angle*)

turtle.**lt**(*angle*)

|  |  |
| --- | --- |
| **Parameters:** | **angle** – a number (integer or float) |

Turn turtle left by *angle* units.

**>>>** turtle.left(45)

**5] goto() :**

turtle.**goto**(*x*, *y=None*)

turtle.**setpos**(*x*, *y=None*)

turtle.**setposition**(*x*, *y=None*)

|  |  |
| --- | --- |
| **Parameters:** | * **x** – a number or a pair/vector of numbers * **y** – a number or None |

If *y* is None, *x* must be a pair of coordinates or a [Vec2D](https://docs.python.org/3.3/library/turtle.html?highlight=turtle#turtle.Vec2D) (e.g. as returned by [pos()](https://docs.python.org/3.3/library/turtle.html?highlight=turtle" \l "turtle.pos" \o "turtle.pos)).

Move turtle to an absolute position. If the pen is down, draw line. Do not change the turtle’s orientation.

**>>>** tp = turtle.pos()

**>>>** tp

(0.00,0.00)

**>>>** turtle.setpos(60,30)

**>>>** turtle.pos()

(60.00,30.00)

**>>>** turtle.setpos((20,80))

**>>>** turtle.pos()

(20.00,80.00)

**>>>** turtle.setpos(tp)

**>>>** turtle.pos()

(0.00,0.00)

**5] speed() :**

turtle.**speed**(*speed=None*)

|  |  |
| --- | --- |
| **Parameters:** | **speed** – an integer in the range 0..10 or a speedstring (see below) |

Set the turtle’s speed to an integer value in the range 0..10. If no argument is given, return current speed.

If input is a number greater than 10 or smaller than 0.5, speed is set to 0. Speedstrings are mapped to speedvalues as follows:

* “fastest”: 0
* “fast”: 10
* “normal”: 6
* “slow”: 3
* “slowest”: 1

Speeds from 1 to 10 enforce increasingly faster animation of line drawing and turtle turning.

Attention: *speed* = 0 means that *no* animation takes place. forward/back makes turtle jump and likewise left/right make the turtle turn instantly.