Introduction to Computer Programming
CSCI-UA 2

Programming Graphics
Python’s Turtle Module
Turtle Graphics

Turtle is a standard Python module for programming graphics on a Cartesian plane.

The “turtle” is a cursor that moves around a canvas drawing lines and shapes.

Many of the programming concepts we’ve learned so far are applicable to drawing.

We simply need to add some turtle syntax to our vocabulary.
Turtle Graphics

Creating a new turtle

Import module: `import turtle`

The turtle module introduces two new types: Turtle and Screen

turtle.Screen() creates a window with a canvas for drawing

turtle.Turtle() creates an object that does the drawing
Turtle Graphics

Methods

“Methods” allow us to modify the turtle and the window objects

forward(distance)
backward(distance)
left(angle)
right(angle)
circle(radius)
color()
pensize(width)
begi_fill()
end_fill()
title('Title')
Turtle Graphics

Attributes

• Location
• Orientation
• Drawing tool (pen)
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