

CS-2 20 10-9-20

11

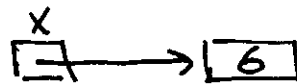
Variables

a variable is a name for an area of memory.

Picture



better Picture



variable names: (i.e. identifiers)

- may be arbitrarily long
- may consist only of
 - letters
 - underscores
 - digits
- may not begin with a digit
- may not be Python keyword

order of operations in arithmetic

- P arenttheses
- E xponents
- M ultiplication
- D ivision
- A dd
- S ubtract

Ex.

$$2 * 3 * 4$$

$$(2 * 3) * 4$$

$$2 * (3 * 4) \times$$

turtle module - turtle graphics

Ex. Turtle1.py

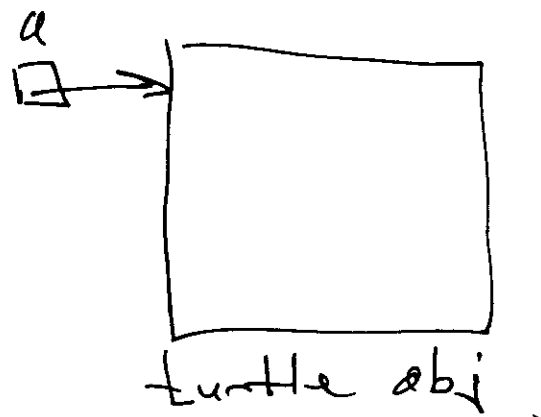
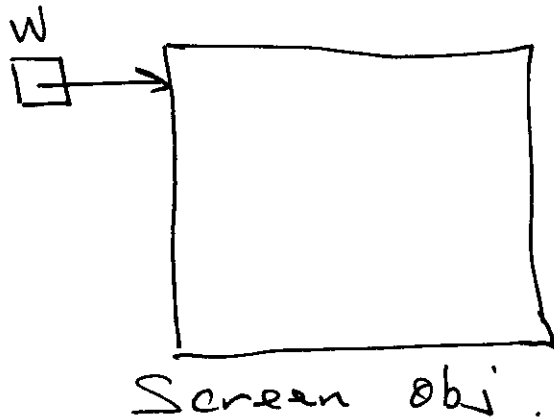
new types when import turtle.

Turtle ← a turtle object

Screen ← Screen object

`w = turtle.Screen()` ← creates
Screen object

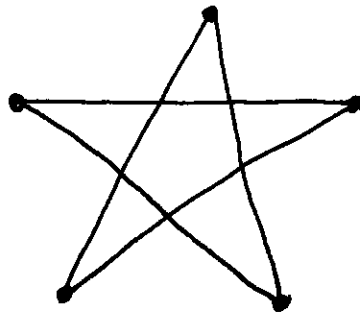
`a = turtle.Turtle()` ← creates
Turtle object



Exercise.

use turtle module to draw

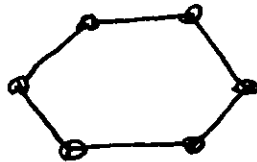
- Square
- rectangle
- star



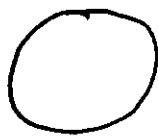
- triangle
- pentagon



- hexagon



- circle



- other shapes.

Ex. Turtle2.py

Turtle3.py