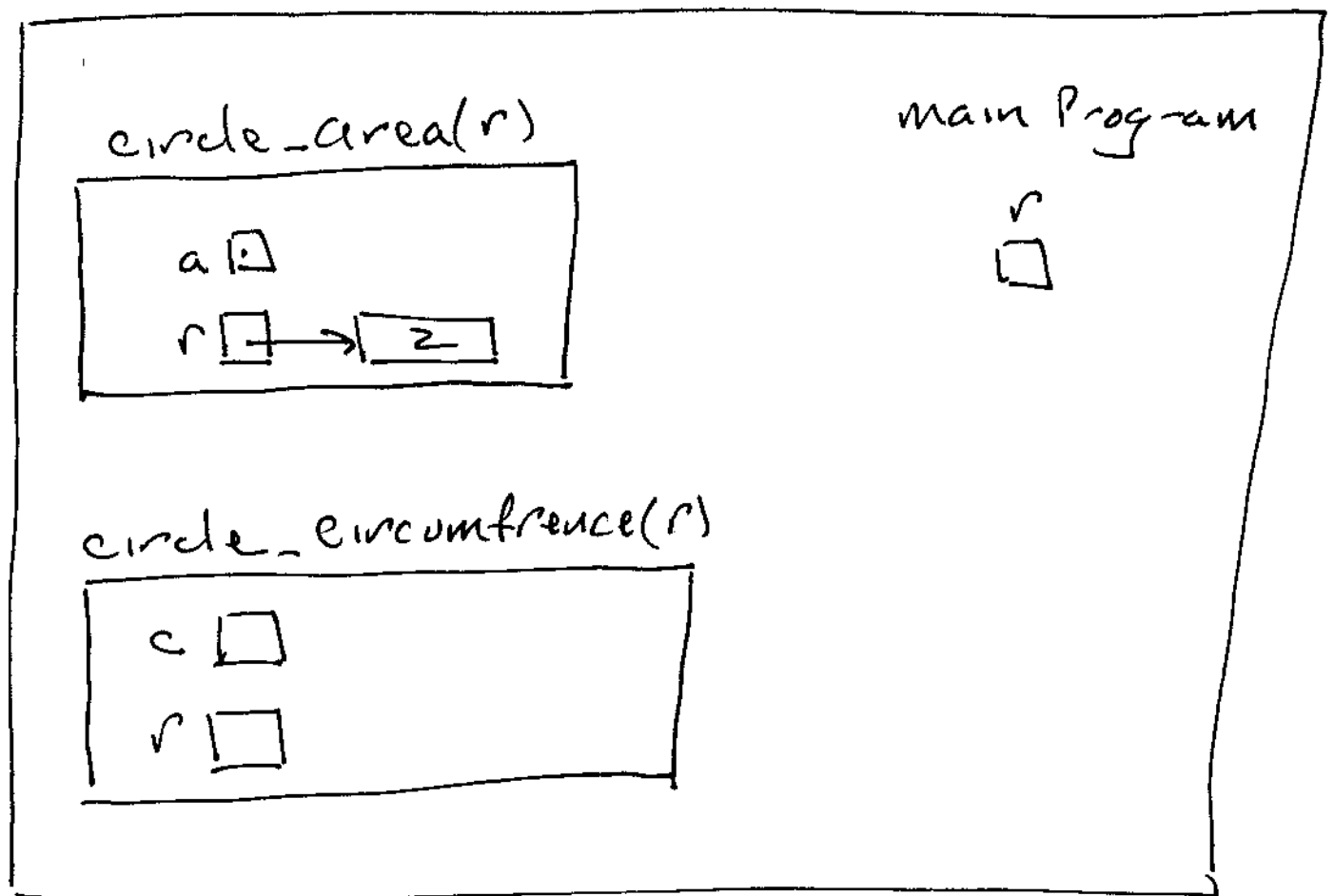


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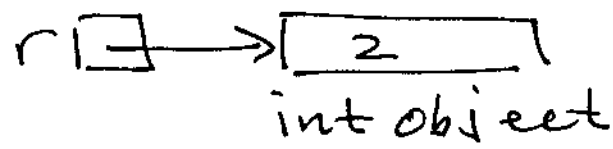
Ex. circle2.py

memory area for circle2.py



What happens when `circle_area(2)` is called?

1. memory is allocated for function parameters : r , and for local variables : a .
2. function argument(s) z is copied to r



3. execution transfers to body of function
4. when execution is complete memory areas for parameters z local variables (a, r) are deallocated.
5. execution transfers back to point where fcn was called. if there was a return value, that value is the value of the fcn call, as an expression.

Ex, circles.py

like Pa2!

Ex, Turtle1.py

windows has 2 (main) command line graphics interpreters.

- command Prompt (cmd) yes
- Power-shell yes
- Windows subsystem for Linux (bash) No

→ (WSL)
roughly equivalent to terminal
on a Mac.

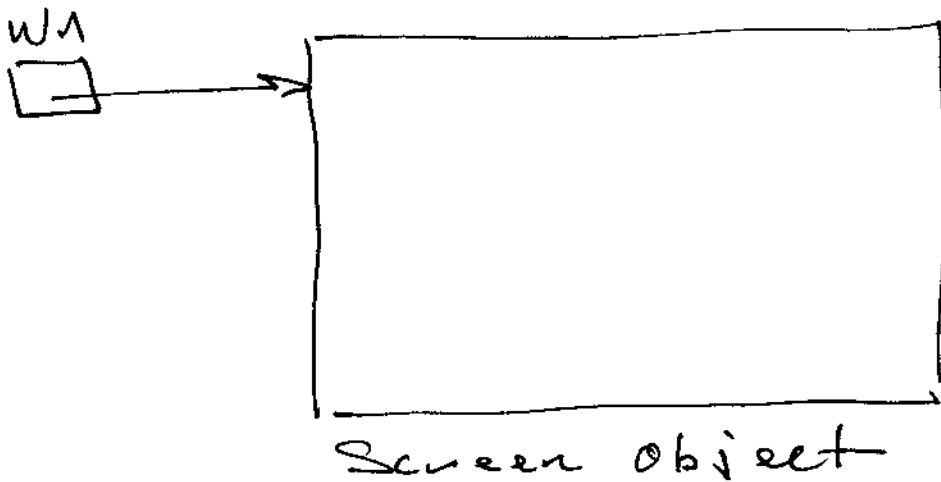
- `import turtle`

brings in turtle library module,
including 2 new types.

- `Turtle (turtle.Turtle)`
- `Screen (turtle.Screen)`

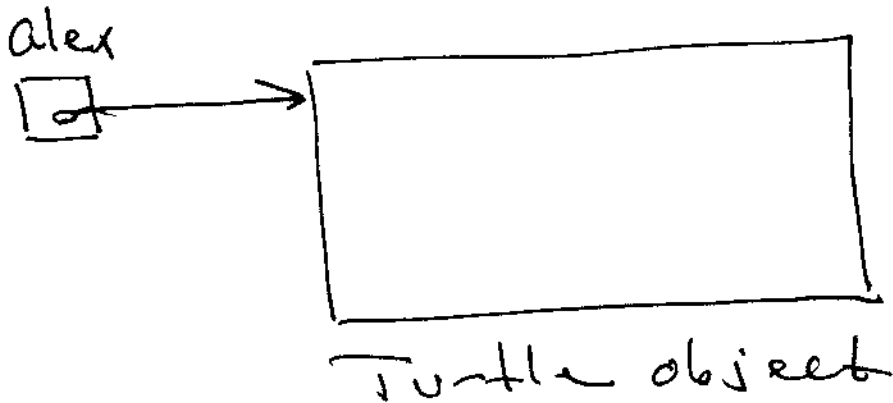
↑
new type

- `wn = turtle.Screen()`
constructs an object of type
`turtle.Screen`



• alex = turtle.Turtle()

construct a Turtle object



each new object has a set of operations associated with it, called methods or functions.
methods are the things that an object can do.

Turtle methods :

forward()

backward()

right()

left()

setPos(), Pos()

setx(), xcor()

sety(), ycor()

circle()

dot(), stamp()

Penup()

Pendown()

Pencolor()

Screen methods :

bgcolor()

clear()

mainloop() ← for interactive graphics.