

- Pal ext 1 last day
- quiz 1 today

Exercise: Research the following
turtle operations:

forward()	circle()
backward()	dot()
right()	stamp()
left()	penup()

setpos()	pendown()
setx()	pencolor()
sety()	

pos()
xcor()
ycor()

Screen operations:

bgcolor()
bye()
clear()
mainloop()

Iteration

Ex. • lines 16-21 of Turtle 3.Py

draw Δ

• lines 26-33 - - - - -

draw $\square$

Iterative Control Structures:

- for loop
- while loop

for loop template

loop control variable (lcV)

for variable in list:

---> do something
 ---> do something
 ...
 ---> do something

} ← loop body

end for

note:

any type of object can be an element of a list.

A = ['one', 'two', 'three']

B = [1, 2, 3]

C = [1.0, 2.0, 3.0]

D = [A, B, C]

list of:

strings

ints

floats

lists

Ex. Loop2.py

Ex. Loop3.py

note: $\text{range}(a, b)$ produces a list
object of ints from a up to (b-1)

to do something n times, do

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for x in range($0, n$): $\# x=0$ to $(n-1)$
....do something.

same thing:

for x in range(n): $\# x=0$ to $(n-1)$
....do something

see

Loop4.py

TurtleLoop1.py

⋮

TurtleLoop4.py