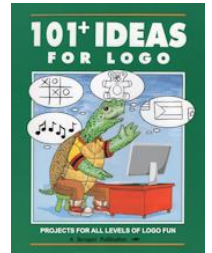


“Turtle Tuesday” Logo Challenges

These September Challenges are from *101+ Ideas for Logo*, which comes for free with every Logo license.



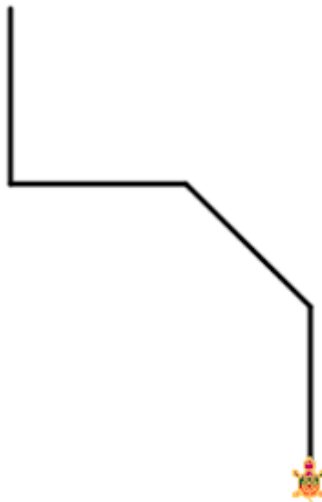
September 3, 2024

Challenge No. 101

for Logo, *Kinderlogo*, Pro-Bot, and InO-Bot users

SYMMETRY from Level 1 of 101+ Ideas for Logo

Complete this symmetrical design by drawing the mirror image of the lines on the right side.



Then create a half of a symmetrical design for your friend to finish.

Our solution:

To complete the design:

```
FD 90
RT 45
FD 90
RT 45
FD 90
LT 90
FD 90
```

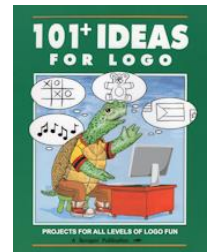
The draw the entire design:

```
FD 90 LT 45
FD 90 LT 45
FD 90 RT 90
FD 90
PU HOME PD
FD 90 RT 45
FD 90 RT 45
FD 90 LT 90
FD 90
```

September 10, 2024

Challenge No. 102

for Logo and InO-Bot users



INCA TAPESTRY
from Level 2 of
101+ Ideas for Logo

Start with this
small pattern.

Flip or rotate that pattern
to make this larger one.

What
interesting
designs can
you make
with it?

Our solution:

```
TO INCA
SETW 2
REPEAT 4 [FD 100 RT 90]
RT 90 FD 20 LT 90
REPEAT 4 [FD 25 RT 90 FD 20 LT 90]
END
```

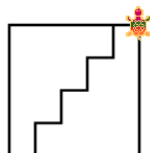
```
TO INCA2
SETW 2
REPEAT 4 [FD 100 LT 90]
LT 90 FD 20 RT 90
REPEAT 4 [FD 25 LT 90 FD 20 RT 90]
END
```

```
TO DESIGN
INCA
RT 180 INCA2
PU RT 90 FD 100 LT 90 FD 100 PD
LT 180 INCA
LT 90 FD 100 RT 90 BK 100
INCA2
END
```

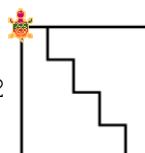
```
TO FANCY.DESIGN
DRAW SETW 2
REPEAT 4 [DESIGN RT 90]
END
```

```
DRAW FANCY.DESIGN
```

INCA



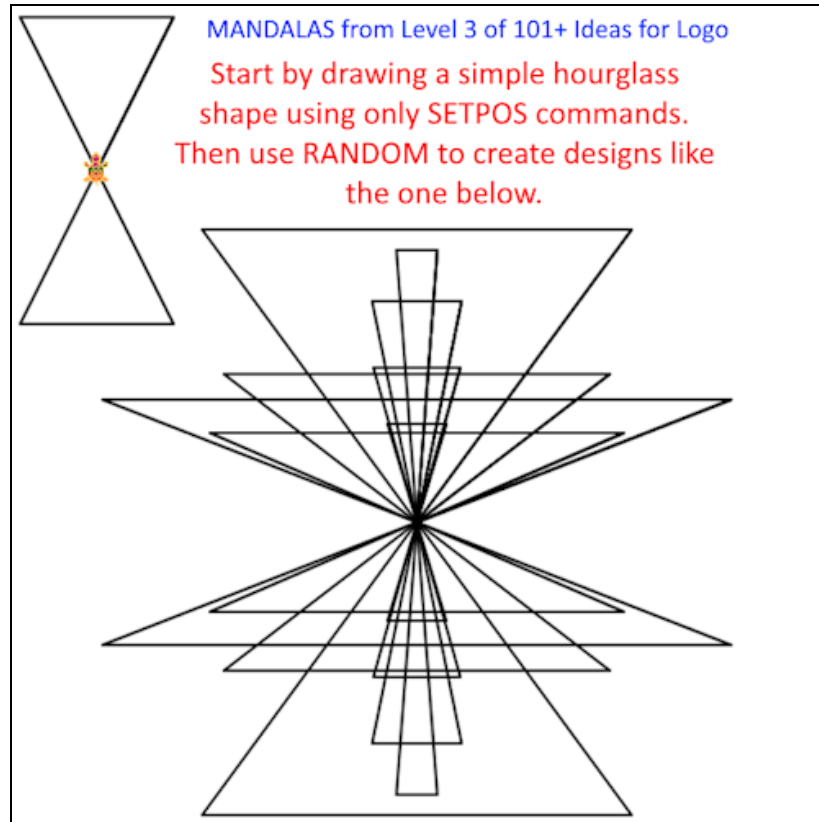
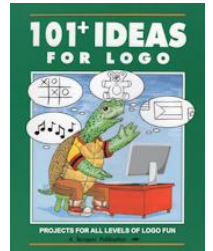
INCA2



September 17, 2024

Challenge No. 103

for Logo Users



Our solution:

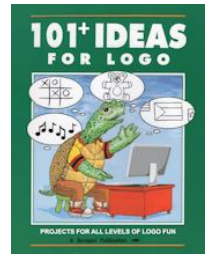
```
TO MANDALA :A :B
SETPOS LIST :A :B
SETPOS LIST -:A -:B
SETPOS LIST :A -:B
SETPOS LIST -:A :B
SETPOS LIST :A :B
SETPOS [0 0]
END
```

```
DRAW SETW 2 REPEAT 8 [MANDALA RANDOM 250 RANDOM 250]
```

September 24, 2024

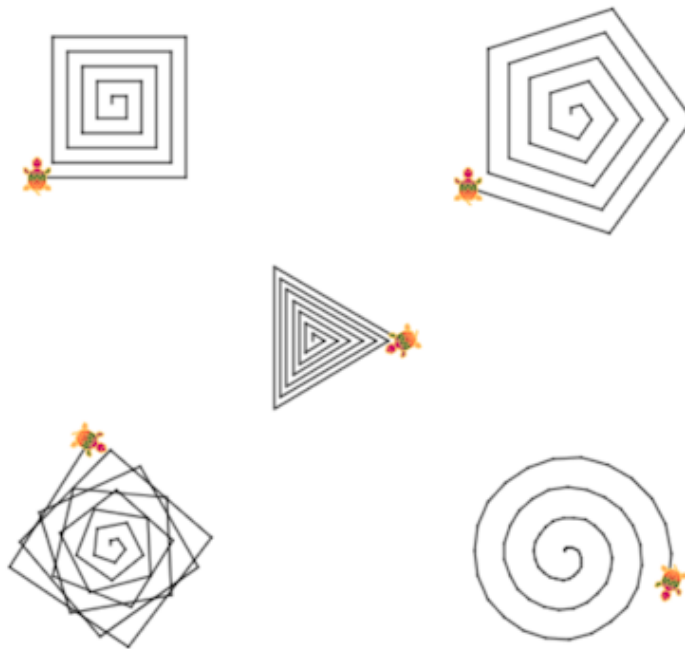
Challenge No. 104

for Logo and InO-Bot users



SPIRALS from Level 4 of 101+ Ideas for Logo

Can you write one procedure that you can use to draw all these spiral designs?



You'll need to use variables, conditionals, and recursion.

Our solutions — Play with the inputs to SPIRAL to get different spiral designs!

A simple version with variables for the distance, turn, and ending value for the conditional:

```
TO SPIRAL :SIZE :TURN :END
IF :SIZE > :END THEN STOP
FD :SIZE
RT :TURN
SPIRAL :SIZE + 15 :TURN :END
END
```

```
DRAW SPIRAL 15 120 300
```

This version adds variables for how much to add to the distance and turn each time:

```
TO SPIRAL :SIZE :TURN :SIZEINC :TURNINC :END
IF :SIZE > :END THEN STOP
FD :SIZE RT :TURN
SPIRAL :SIZE + :SIZEINC :TURN+:TURNINC :SIZEINC :TURNINC :END
END
```

```
DRAW SPIRAL 15 120 15 0 300
```