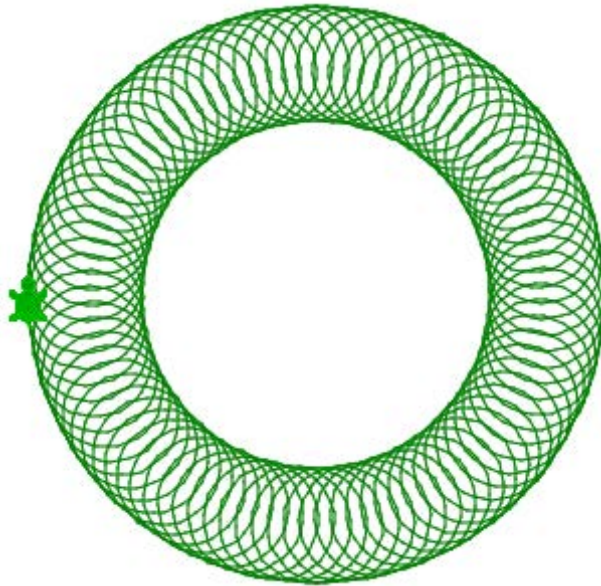


“Turtle Tuesday” Logo Challenges

December 6, 2022

Challenge No. 10

Holiday Wreath



Can you design this wreath in Logo?

Our solution:

```
SETPC "GREEN REPEAT 90 [FD 18 REPEAT 36 [FD 11 RT 10] RT 4]
```

December 13, 2022

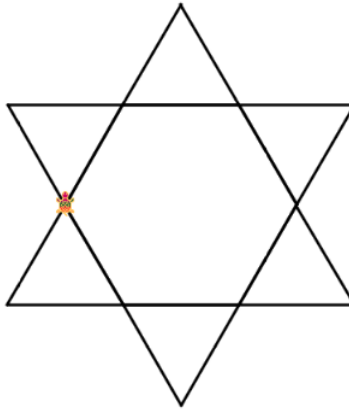
Challenge No. 11

Can you design one of these symbols in Logo?

The Star of David and Menorah are symbols of Judaism and Hanukkah (Dec. 18 – 26).

A set of 7 candles, a kinara, symbolizes the African-American celebration of Kwanzaa (Dec. 26 – Jan. 1).
Try drawing that, too.

1. Drawing the Star of David



Draw a hexagon with a triangle on each side.

```
RT 30 REPEAT 6 [FD 120 REPEAT 3 [LT 120 FD 120] RT 60] LT 30
```

Or draw 6 triangles on the way to drawing a hexagon.

```
RT 30 REPEAT 6 [REPEAT 3 [FD 120 LT 120] FD 120 RT 60] LT 30
```

2. Drawing a candle

First, try to draw a candle. When you have figured out the instructions, type `TO CANDLE` to enter the editor and copy and paste the instructions there.

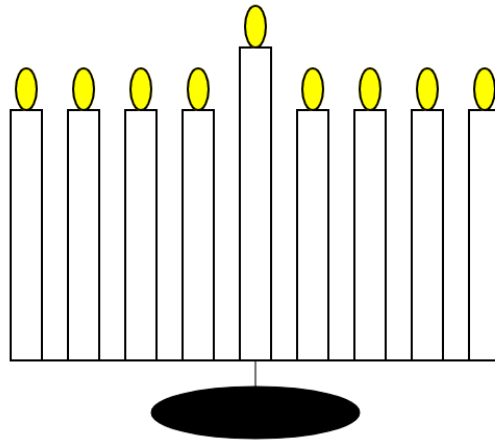
Click [Run](#) to define the procedure. Type `DRAW CANDLE` to see it!

```
TO CANDLE
  SETWIDTH 2
  REPEAT 2 [FD 240 RT 90 FD 30 RT 90]
  FD 240 RT 90 FD 15 LT 90
  PU FD 20 PD
  SETPC "YELLOW
  (STAMPOVAL 10 20 TRUE)
  SETPC "BLACK
  (STAMPOVAL 10 20)
  PU BK 20 PD RT 90
  FD 15 RT 90 FD 240 RT 180
```

END



3. Drawing a menorah



Use the candle procedure to create a row of them for a menorah.
You'll also need a new procedure for the taller candle in the center.

You can edit the CANDLE procedure and give it a new name before clicking [Run](#).

```
TO MENORAH
  PU BK 200 PD
  (STAMPOVAL 100 25 TRUE)
  FD 50 LT 90 FD 235 RT 90
  REPEAT 4 [CANDLE RT 90 FD 25 LT 90]
  TALLCANDLE RT 90 FD 25 LT 90
  REPEAT 3 [CANDLE RT 90 FD 25 LT 90]
  CANDLE PU HOME PD
```

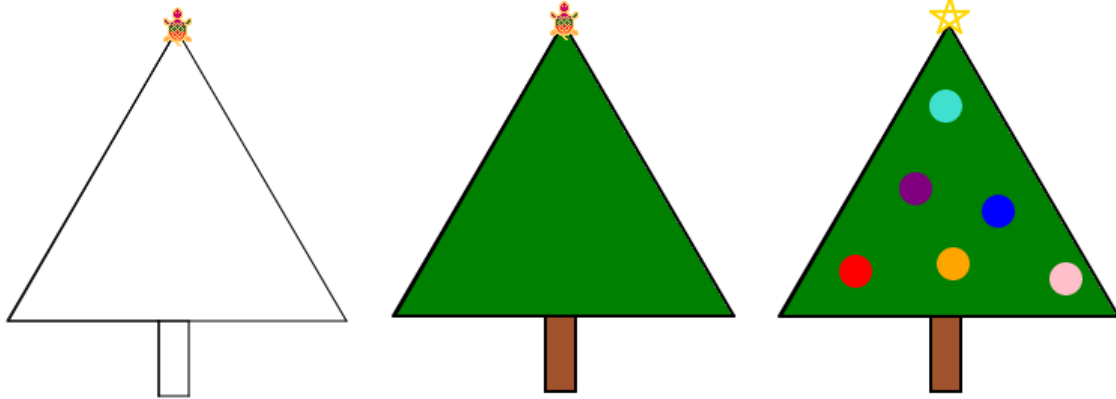
END

```
TO TALLCANDLE
  SETWIDTH 2
  REPEAT 2 [FD 300 RT 90 FD 30 RT 90]
  FD 300 RT 90 FD 15 LT 90
  PU FD 20 PD
  SETPC "YELLOW
  (STAMPOVAL 10 20 TRUE)
  SETPC "BLACK
  (STAMPOVAL 10 20)
  PU BK 20 PD RT 90
  FD 15 RT 90 FD 300 RT 180
```

END

December 20, 2022

Challenge No. 12



Can you design a Christmas tree in Logo? Here's how we did it.

Plain tree:

```
TO TREE
DRAW
REPEAT 2 [FD 50 RT 90 FD 20 RT 90]
FD 50 RT 90
BK 100
REPEAT 3 [FD 225 LT 120]
LT 60
FD 225
LT 30
END
```

Colored tree:

```
TO COLORFULTREE
DRAW SETWIDTH 2
REPEAT 2 [FD 50 RT 90 FD 20 RT 90]
PU RT 45 FD 5 PD SETPC "SIENNA
FILL PU BK 5 LT 45 PD
SETPC "BLACK
FD 50 RT 90 BK 100
REPEAT 3 [FD 225 LT 120]
PU LT 45 FD 10 PD
SETPC "GREEN FILL
PU BK 10 RT 45 PD
SETPC "BLACK
LT 60 FD 225 LT 30
END
```

Decorated tree:

```
TO MY.TREE
DRAW SETWIDTH 2
REPEAT 2 [FD 50 RT 90 FD 20 RT 90]
PU RT 45 FD 5 PD SETPC "SIENNA
FILL PU BK 5 LT 45 PD
SETPC "BLACK
FD 50 RT 90 BK 100
REPEAT 3 [FD 225 LT 120]
PU LT 45 FD 10 PD
SETPC "GREEN FILL
PU BK 10 RT 45 PD
SETPC "BLACK
LT 60 FD 225 LT 30
PU RT 2 FD 18 PD LT 20
;STAR
SETPC "GOLD
REPEAT 5 [BK 25 RT 720/5]
SETPC "BLACK
SETHEADING 0
PU SETXY [-50 80] PD
SETPC "RED (STAMPOVAL 10 10 TRUE)
PU SETXY [45 120] PD
SETPC "BLUE (STAMPOVAL 10 10 TRUE)
PU SETXY [10 190] PD
SETPC "TURQUOISE (STAMPOVAL 10 10 TRUE)
PU SETXY [-10 135] PD
SETPC "PURPLE (STAMPOVAL 10 10 TRUE)
PU SETXY [90 75] PD
SETPC "PINK (STAMPOVAL 10 10 TRUE)
PU SETXY [15 85] PD
SETPC "ORANGE
(STAMPOVAL 10 10 TRUE)
HT
END
```

December 27, 2022

Challenge No. 13



Can you design this in Logo? Write a procedure for each of the 8 letters, a procedure to move from letter to letter, and a main procedure to draw the entire design. Here's how we did it.

TO HAPPYNEWYEAR

```
H MOVE A MOVE P
MOVE P MOVE Y
PU HOME BK 150 PD
N MOVE E MOVE W
PU HOME BK 300 PD
Y MOVE E MOVE A MOVE R
END
```

TO MOVE

```
PU RT 90 FD 40 LT 90 PD
END
```

TO H

```
FD 100 BK 50 RT 90
FD 50 LT 90 FD 50
BK 100
END
```

TO A

```
RT 30 FD 115 BK 60
RT 60 FD 60 LT 120
FD 60 BK 115
RT 30
END
```

TO P

```
FD 100 BK 50
REPEAT 4 [FD 50 RT 90]
BK 50
MOVE
END
```

TO Y

```
PU RT 90 FD 30 LT 90 PD
FD 50
LT 30 FD 58 BK 58 RT 60
FD 58 BK 58
LT 30
BK 50
PU RT 90 FD 30 LT 90 PD
END
```

TO N

```
FD 100 LT 30 BK 115
RT 30 FD 100 BK 100
END
```

TO E

```
FD 100 RT 90
FD 50 BK 50 LT 90
BK 50 RT 90
FD 50 BK 50 LT 90
BK 50 RT 90 FD 50 LT 90
END
```

TO W

```
PU FD 100 PD
LT 20 BK 110
RT 40 FD 110
LT 40 BK 110 RT 40
FD 110 LT 20 PU
BK 100 PD
END
```

TO R

```
FD 50
REPEAT 4 [FD 50 RT 90]
RT 90 FD 25 LT 90
LT 30 BK 58 RT 30
END
```