

Python Turtle Stars

First we're going to write a program to draw a star:

```
from turtle import *

color("WhiteSmoke")
bgcolor("MidnightBlue")
pendown()
begin_fill()

#draw the star shape
for side in range(5):
    left(144)
    forward(50)

end_fill()
penup()

forward(100)
done()
```

Now change the program so that it uses a function:

```
from turtle import *

# A function for drawing a star #'def' means 'define'
def drawStar():
    pendown()
    begin_fill()
    for side in range(5):
        left(144)
        forward(50)
    end_fill()
    penup()

# Now use the function to draw a light grey star on a dark blue
background
color("WhiteSmoke")
bgcolor("MidnightBlue")
drawStar()
forward(100)
drawStar()
left(120)
forward(150)
drawStar()
hideturtle()
done()
```

Now change the function to draw different size stars

```
def drawStar(starSize)
...
    forward(starSize)
...

drawStar(100)
...
drawStar(50)
```

Now, change the function so that we can draw stars of different sizes and colours:

```
def drawStar(starSize, starColour)
    color(starColour)
...
    forward(starSize)
...

drawStar(100, "Red")
...
drawStar(50, "White")
```

Have fun creating many stars of various sizes and colours!