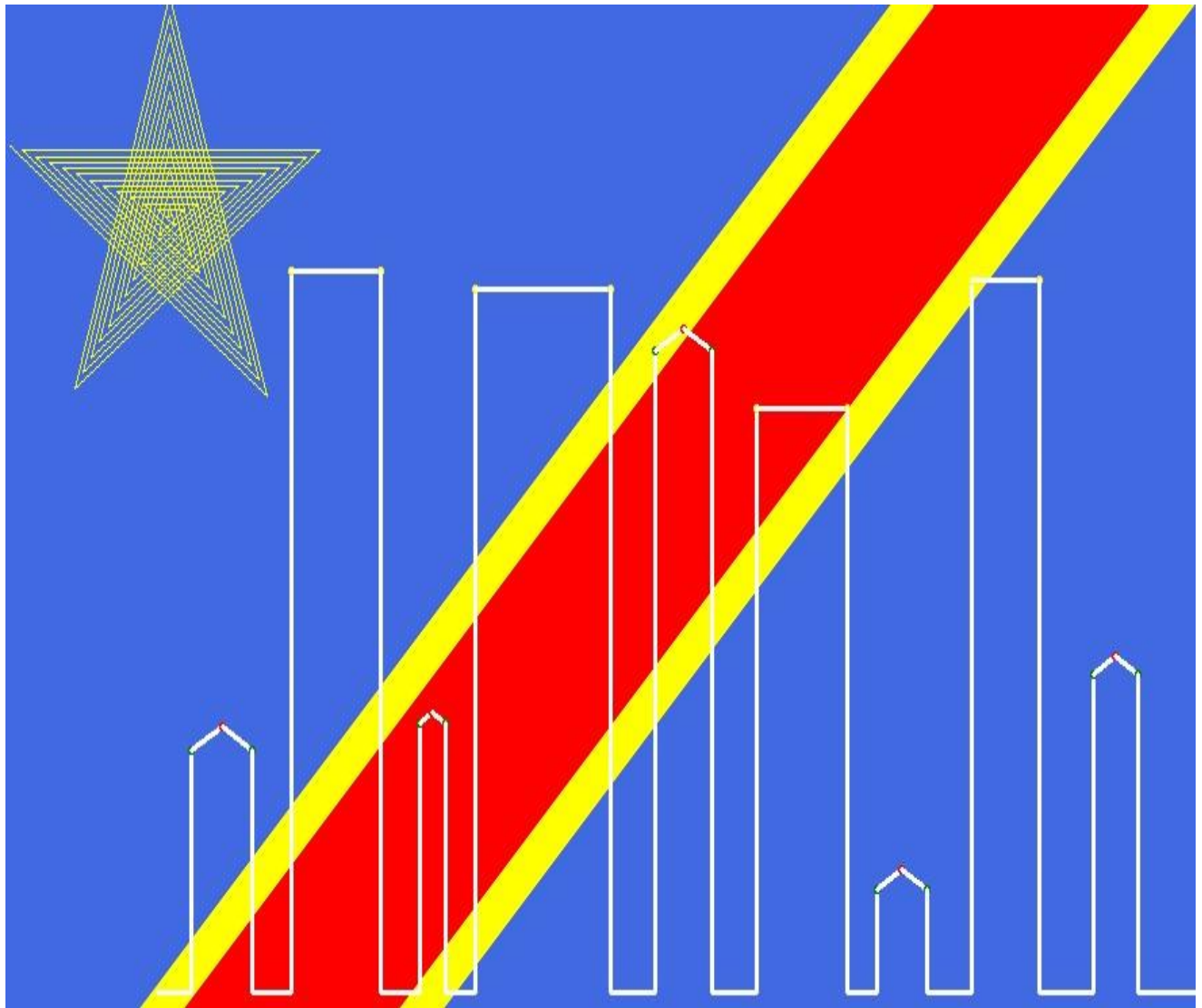


Democratic Republic of Congo: Art of the lost city of Kinshasa – Gwen Marie S Bashizi

In this assignment, I represent my origins flag through the art of turtle Python.



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```
1  import random
2  import turtle #imports turtle library
3  turtle.speed(0) #sets turtle speed to max speed by removing animation of drawing
4  turtle.bgcolor('royalblue') #sets background to canvas as royal blue
5  n = 60
6  def star_yellow(): # defines a funciton called Star_yellow
7      turtle.width(1) # sets the width of the pen (aka thickness) to 55 pixels
8      turtle.color('yellow') #sets pen color to yellow
9      turtle.penup() #lifts pen up to allow to move turtle around canvas without drawing
10     turtle.goto(-340,230) #place turtle on canvas coordinates
11     turtle.pendown() #places pen back down
12
13
14     for i in range(n): #for loop for star lattices
15         turtle.forward(i*4)
16         turtle.right(144) # turtle change direction by 144 degrees
17
18
19     first_yellow() #run following function
20
21 def first_yellow(): #defines function called first yellow line
22     turtle.width(30) #changes width to smaller width of pen
23     turtle.color('yellow') #changes color to yello
24     turtle.penup()
25     turtle.goto(-390,-260) #moves turtle to bottom left without drawing
26     turtle.pendown()
27     for i in range(150): #do this loop many times
28         turtle.left(90) #turns left 90 degrees
29         turtle.forward(4) #goes forward small amount of pixels
30         turtle.right(90) #go right 90 degrees
31         turtle.forward(4) #go forward yet again 4 pixels
32     second_yellow()
33
```

```

4  #Same thing goes on for the rest of the flag.
5
6  def second_yellow():
7      turtle.width(30)
8      turtle.color('yellow')
9      turtle.penup()
10     turtle.goto(-270,-320)
11     turtle.pendown()
12     for i in range(170):
13         turtle.left(90)
14         turtle.forward(4)
15         turtle.right(90)
16         turtle.forward(4)
17     red()
18
19 def red():
20     turtle.width(110)
21     turtle.color('red')
22     turtle.penup()
23     turtle.goto(-380,-340)
24     turtle.pendown()
25     for i in range(180):
26         turtle.left(90)
27         turtle.forward(4)
28         turtle.right(90)
29         turtle.forward(4)
30
31 star_yellow()
32
33 import turtle as t
34 import random as r

```

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```

65
66 t.up()
67 t.goto(-350, -200)
68 t.color('white')
69 t.down()
70 turtle.pensize(3)
71 #To begin with I am going to over line the capital Kinshasa on the Congolese Flag.
72 def city(n, size):
73     square_pos = 0
74
75     while square_pos < n:
76         height = r.randrange(40, 2*size)
77         width = r.randrange(10, 30)
78         length = r.randrange(20, 24)
79         t.forward(size/r.randrange(5,10))
80         t.left(90)
81         t.forward(height)
82         if square_pos % 2 == 0:
83             t.dot(5, 'green')
84             t.right(90)
85             t.forward(width)
86             t.dot(5, 'red')
87             t.right(90)
88             t.forward(width)
89             t.dot(5, 'green')
90             t.right(90)
91         else:
92             t.right(90)
93             t.dot(5, 'yellow')
94             t.forward(size/r.randrange(2, 5))
95             t.dot(5, 'yellow')
96             t.right(90)

```

```

96         t.right(90)
97
98         t.forward(height)
99         t.left(90)
100        square_pos += 1
101
102        t.forward(3*length)
103        t.left(60)
104        t.forward(height)
105        t.dot(14, 'blue')
106        t.right(120)
107        t.forward(height)
108
109
110
111    print(city(9, 200))
112
113

```

Clear version

```

import random import turtle #imports turtle library turtle.speed(0) #sets turtle
speed to max speed by removing animation of drawing turtle.bgcolor('royalblue')
#sets background to canvas as royal blue n = 60 def star_yellow(): # defines a
funciton called Star_yellow turtle.width(1) # sets the width of the pen (aka
thickness) to 55 pixels turtle.color('yellow') #sets pen color to yellow
turtle.penup() #lifts pen up to allow to move turtle around canvas without
drawing turtle.goto(-340,230) #place turtle on canvas coordinates
turtle.pendown() #places pen back down

```

```

for i in range(n): #for loop for star lattices
turtle.forward(i*4) turtle.right(144) # turtle change
direction by 144 degrees

```

```
first_yellow() #run following function
```

```
def first_yellow(): #defines function called first yellow line
turtle.width(30) #changes width to smaller width of pen
turtle.color('yellow') #changes color to yellow turtle.penup()
turtle.goto(-390,-260) #moves turtle to bottom left without drawing
turtle.pendown() for i in range(150): #do this loop many times
turtle.left(90) #turns left 90 degrees turtle.forward(4) #goes
forward small amount of pixels turtle.right(90) #go right 90
degrees turtle.forward(4) #go forward yet again 4 pixels
second_yellow()
```

```
#Same thing goes on for the rest of the flag.
```

```
def second_yellow():
turtle.width(30)
turtle.color('yellow')
turtle.penup() turtle.goto(-270,-
320) turtle.pendown() for i
in range(170):
turtle.left(90)
turtle.forward(4)
turtle.right(90)
turtle.forward(4) red()
```

```
def red():
turtle.width(110)
```

```

turtle.color('red')
turtle.penup()
turtle.goto(-380,-340)
turtle.pendown()    for i
in range(180):
turtle.left(90)
turtle.forward(4)
turtle.right(90)
turtle.forward(4)

```

```

star_yellow()

```

```

import turtle as t import
random as r

```

```

t.up()
t.goto(-350, -200)
t.color('white')
t.down() turtle.pensize(3)

```

```

#To begin with I am going to over line the capital Kinshasa on the Congolese
Flag.

```

```

def city(n, size):
square_pos = 0
    while square_pos
< n:
        height = r.randrange(40, 2*size)
width = r.randrange(10, 30)    Length
= r.randrange(20, 24)

```

```
t.forward(size/r.randrange(5,10))
t.left(90)
t.forward(height)
if square_pos % 2 == 0:
    t.dot(6, 'green')
    t.right(60)
    t.forward(width)
    t.dot(6, 'red')
    t.right(60)
    t.forward(width)
    t.dot(6, 'green')
    t.right(60)
else:
    t.right(90)
    t.dot(6, 'yellow')
    t.forward(size/r.randrange(2, 5))
    t.dot(6, 'yellow')
    t.right(90)

t.forward(height)
t.left(90)
square_pos += 1
```

```
t.forward(3*length)
t.left(60)
t.forward(height)
t.dot(14, 'blue')
t.right(120)
```

```
t.forward(height)
```

```
print(city(9, 200))
```