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1  """
2
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4  Created:     01/04/2020
5  Description:  Clicking the canvas to draws stars. Clicking the shapes increases their size
6
7  """
8
9  #Background
10 app.background='black'
11
12 #instructions to use the program
13 l1=Label('Click on Pentagons to increase Size and Rotate', 200,10, fill='white', size=16)
14 l2=Label('Click anywhere to draw a Star', 200,26, fill='white', size=16)
15 l3=Label('Click on the shapes to increase Size and Rotate', 200,41, fill='white', size=16)
16 l4=Label('Click to Start', 200,200, fill='white', size=25)
17
18 #list
19 app.colors = [ 'green', 'blue', 'purple', 'red', 'orange', 'yellow', 'darkGoldenrod' ]
20
21 #creates polygon by indexing into lists
22 def drawColoredDiamond(centerX, index):
23     diamonds = RegularPolygon(centerX, 300, 20,5, fill=app.colors[index])
24
25 drawColoredDiamond(100, 1)
26 drawColoredDiamond(300, 5)
27 drawColoredDiamond(150, 6)
28 drawColoredDiamond(350, 3)
29 drawColoredDiamond(50, 4)
30 drawColoredDiamond(250, 2)
31
32 #Pressing the mouse button on the canvas will remove the text and start the program
33 #Clicking on the canvas will create Star wherever you click
34 #Clicking on shapes will increase their size and rotate them
35 def onMousePress(mouseX, mouseY):
36     l1.visible=False
37     l2.visible=False
38     l3.visible=False
39     l4.visible=False
40
41     point = app.group.hitTest(mouseX, mouseY)
42     if (point == None):
43         colors = [ 'pink', 'yellow', 'skyblue', 'Green', 'crimson', 'darkGoldenrod' ]
44         color = choice(colors)
45         star = Star(mouseX, mouseY, 20,5, fill=color)
46
47     else:
48         point.radius += 5
49         point.rotateAngle += 20
```