

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