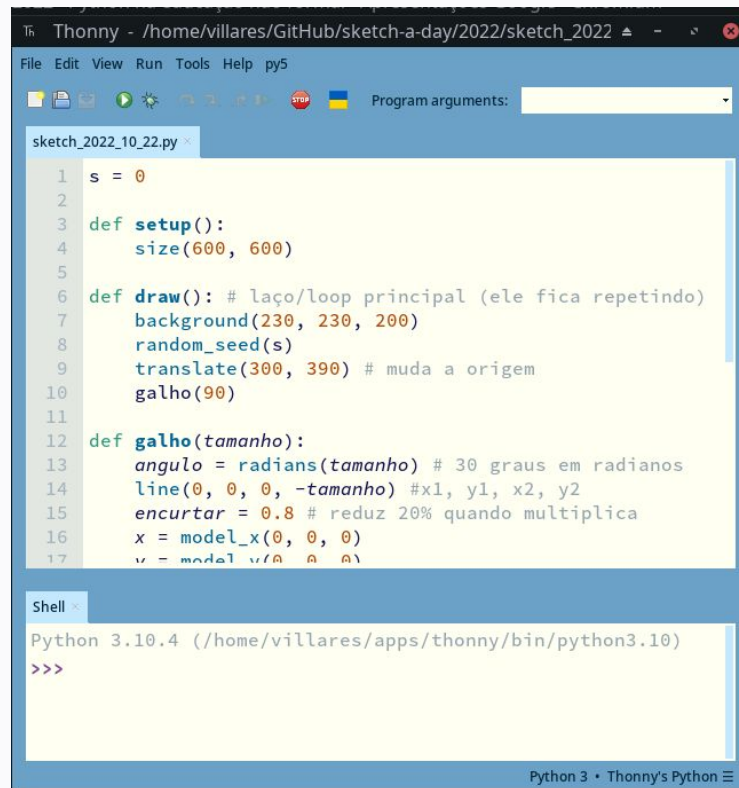


py5 e o Thonny IDE

py5 é uma biblioteca que permite o uso do vocabulário e da infraestrutura gráfica do **Processing** em conjunto com a mais recente versão da linguagem **Python**.

Thonny IDE vem com Python e há um plug-in que facilita usar o **py5** nele!

The image shows a screenshot of the Thonny IDE window. The title bar reads "Thonny - /home/villares/GitHub/sketch-a-day/2022/sketch_2022". The menu bar includes "File", "Edit", "View", "Run", "Tools", and "Help", with "py5" selected. Below the menu is a toolbar with icons for file operations and execution. The main editor area displays a Python script named "sketch_2022_10_22.py". The script defines a variable 's' as 0, a 'setup()' function that sets the window size to 600x600, and a 'draw()' function that serves as the main loop. Inside 'draw()', it sets a background of (230, 230, 200), seeds the random number generator with 's', translates the origin to (300, 390), and calls a 'galho(90)' function. The 'galho(tamanho)' function is defined to draw a line from (0, 0) to (-tamanho, 0) with a weight of 0.8, and then recursively calls itself with a reduced size (0.8 * tamanho) and a new angle. The bottom panel shows a "Shell" window with the Python version 3.10.4 and the Thonny's Python path. The status bar at the bottom indicates "Python 3 • Thonny's Python".

```
1 s = 0
2
3 def setup():
4     size(600, 600)
5
6 def draw(): # laço/loop principal (ele fica repetindo)
7     background(230, 230, 200)
8     random_seed(s)
9     translate(300, 390) # muda a origem
10    galho(90)
11
12 def galho(tamanho):
13     angulo = radians(tamanho) # 30 graus em radianos
14     line(0, 0, 0, -tamanho) #x1, y1, x2, y2
15     encurtar = 0.8 # reduz 20% quando multiplica
16     x = model_x(0, 0, 0)
17     y = model_y(0, 0, 0)
```

Shell

Python 3.10.4 (/home/villares/apps/thonny/bin/python3.10)

>>>

Python 3 • Thonny's Python

Plugin thonny-py5mode

criado por Tristan Bunn

```
import py5

def setup():
    py5.size(500, 500)
    py5.background(200, 255, 255)

def draw():
    py5.fill(py5.random(256),
             py5.random(256),
             py5.random(256))
    diametro = py5.random(10, 50)
    py5.circle(py5.mouse_x,
               py5.mouse_y, diametro)

py5.run_sketch()
```



```
def setup():
    size(500, 500)
    background(200, 255, 255)

def draw():
    fill(random(256),
          random(256),
          random(256))
    diametro = random(10, 50)
    circle(mouse_x, mouse_y, diametro)
```

Também facilita instalar o py5, baixando as dependências mais difíceis como o JDK, saiba mais em <http://github.com/tabreturn/thonny-py5mode/>