Jupyenv&Quarto

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Getting Started

第一部分

Julia

```
using Plots
# define the Lorenz attractor
Base.@kwdef mutable struct Lorenz
    dt::Float64 = 0.02
     ::Float64 = 10
     ::Float64 = 28
     ::Float64 = 8/3
    x::Float64 = 1
    y::Float64 = 1
    z::Float64 = 1
end

function step!(l::Lorenz)
    dx = l.  * (l.y - l.x)
    dy = l.x * (l.  - l.z) - l.y
    dz = l.x * l.y - l.  * l.z
    l.x += l.dt * dx
    l.y += l.dt * dy
    l.z += l.dt * dz
end

attractor = Lorenz()


# initialize a 3D plot with 1 empty series
plt = plot3d(
    1,
    xlim = (-30, 30),
    ylim = (-30, 30),
    zlim = (0, 60),
    title = "Lorenz Attractor",
    legend = false,
```

```
    marker = 2,
)

# build an animated gif by pushing new points to the plot, saving every 10th fra
@gif for i=1:1500
    step!(attractor)
    push!(plt, attractor.x, attractor.y, attractor.z)
end every 10
```

```
Plots.AnimatedGif("/home/guangtao/Dropbox/omnibus/examples/jupyenv+quarto/quarto/t
```

第二部分

Python

```
import matplotlib.pyplot as plt

fig, ax = plt.subplots()

fruits = ['apple', 'blueberry', 'cherry', 'orange']
counts = [40, 100, 30, 55]
bar_labels = ['red', 'blue', '_red', 'orange']
bar_colors = ['tab:red', 'tab:blue', 'tab:red', 'tab:orange']

ax.bar(fruits, counts, label=bar_labels, color=bar_colors)

ax.set_ylabel('fruit supply')
ax.set_title('Fruit supply by kind and color')
ax.legend(title='Fruit color')
```

```
<matplotlib.legend.Legend at 0x7f4574408650>
```