Nivelamento de programação para termodinâmica

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Parte 3: python científico

Gráficos `(from matplotlib import pyplot as plt)`

matplotlib

Untitled.ipynb

Code

In [2]:
```
from matplotlib import pyplot as plt
%matplotlib inline
```

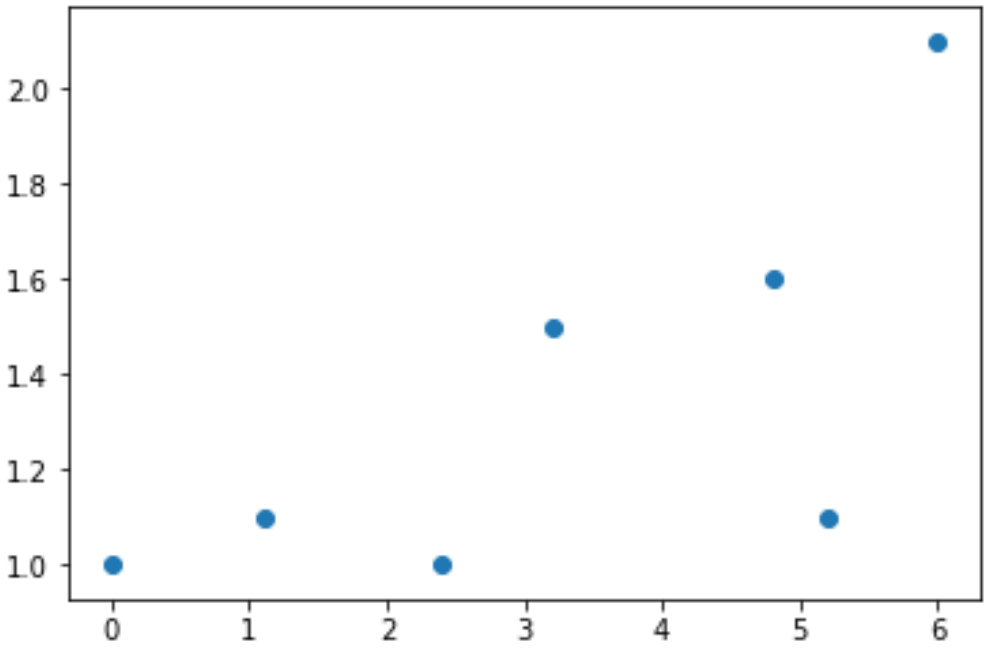
In [ ]:

scatter

```
In [8]: T= [0.0, 1.1, 2.4, 3.2, 4.8, 5.2, 6.0]
        P= [1.0, 1.1, 1.0, 1.5, 1.6, 1.1, 2.1]

In [9]: plt.scatter(T,P)

Out[9]: <matplotlib.collections.PathCollection at 0x7fc03364dda0>
```

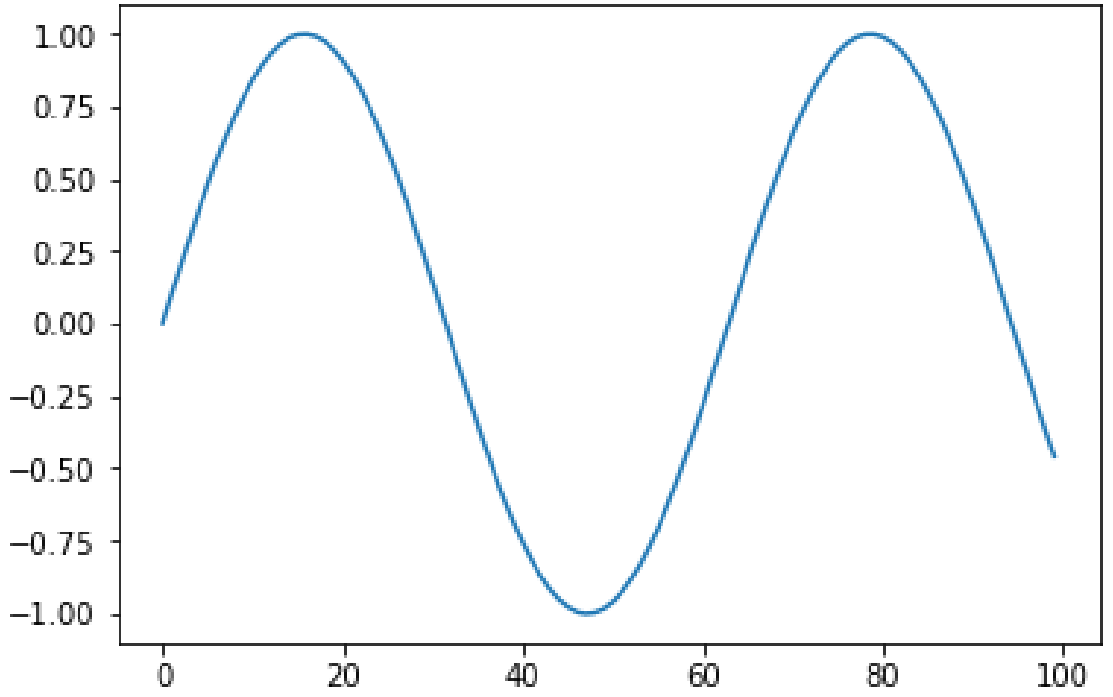


plot

```
In [18]: x=list(range(100))
         from math import sin
         y=[sin(xi/10) for xi in x]

In [20]: plt.plot(x,y)

Out[20]: [<matplotlib.lines.Line2D at 0x7fc033411400>]
```



savefig

In [29]:
```
plt.scatter(T,P,marker='*',color='y',label='amostra 1')
plt.plot(x,y,ls=':',color='b', label='modelo oscilatório')
plt.title("seno estrelado")
plt.ylabel("eixo y")
plt.xlabel("eixo x")
plt.xlim(0,150)
plt.ylim(-.5,2.5)
plt.legend()
plt.savefig("Figura1.png")
```