

# Gráficos

## 4.1 Bibliotecas

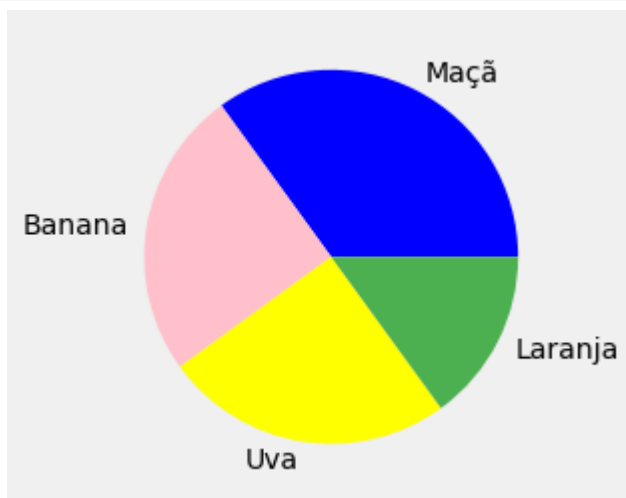
In [29]:

```
import matplotlib.pyplot as plt
import numpy as np
import matplotlib as mlp
import pandas as pd
```

## 4.2 Gráfico de pizza

In [30]:

```
y = np.array([35, 25, 25, 15])
mylabels = ["Maçã", "Banana", "Uva", "Laranja"]
mycolors = ["blue", "pink", "yellow", "#4CAF50"]
plt.pie(y, labels = mylabels, colors = mycolors)
plt.show()
```



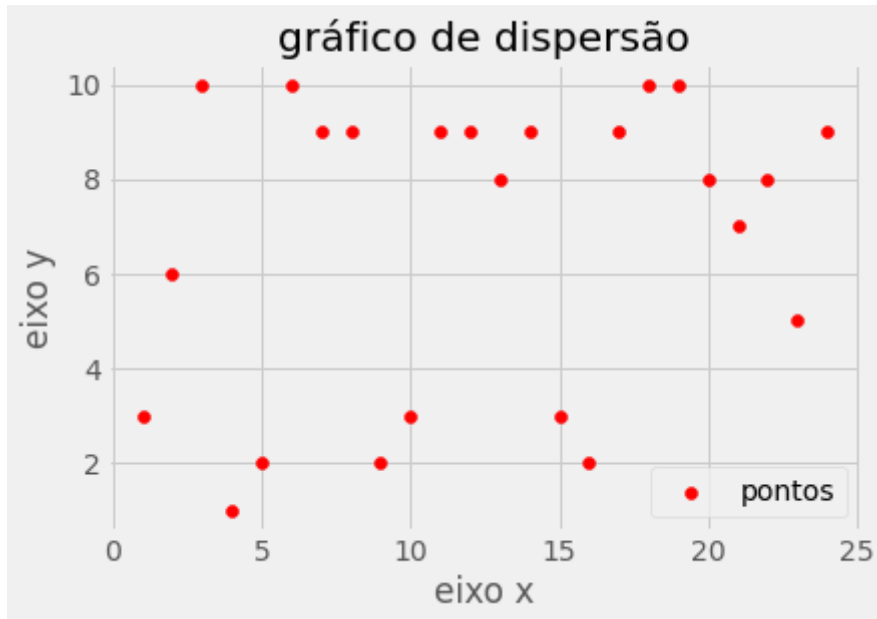
## 4.3 Gráfico de dispersão

In [38]:

```
# values
x = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24]
y = [3,6,10,1,2,10,9,9,2,3,9,9,8,9,3,2,9,10,10,8,7,8,5,9]

plt.scatter(x, y, label= "pontos", color= "red")
plt.xlabel('eixo x')
plt.ylabel('eixo y')
plt.title('gráfico de dispersão')
plt.legend()

plt.show()
```

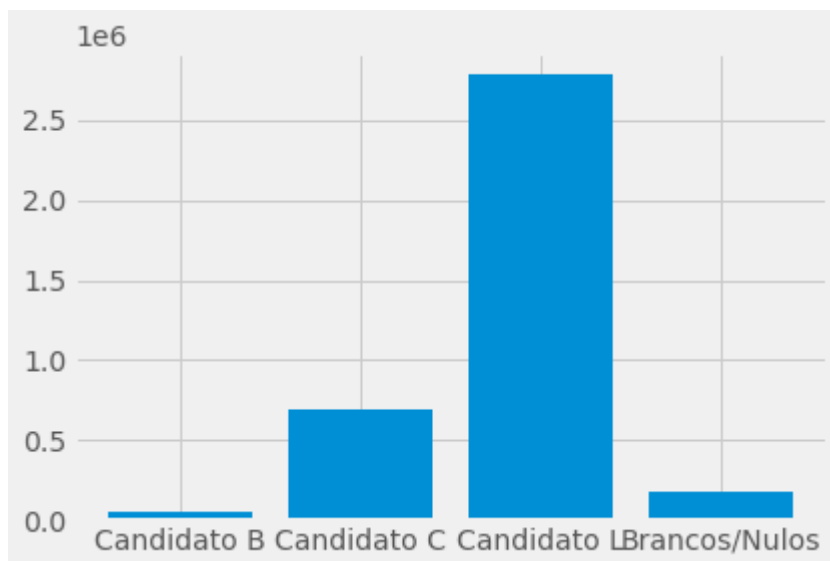


## 4.4 Barra

In [47]:

```
x = np.array(["Candidato B", "Candidato C", "Candidato L", "Brancos/Nulos"])
y = np.array([50654, 686891, 2783451, 175792])

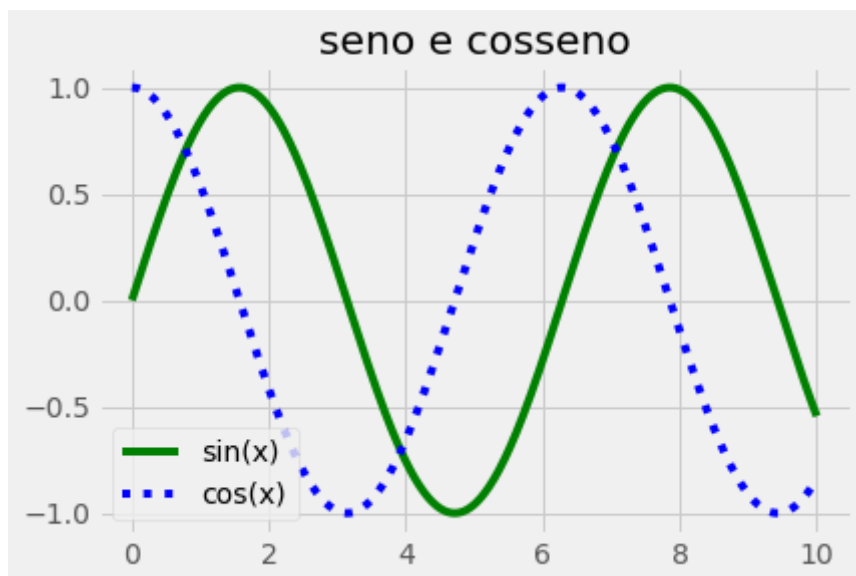
plt.bar(x,y)
plt.show()
```



## 4.5 Funções

In [12]:

```
x = np.linspace(0, 10, 1000)
plt.plot(x,np.sin(x), 'g', label='sin(x)')
plt.plot(x,np.cos(x), ':b', label='cos(x)')
plt.title('seno e cosseno')
plt.legend()
plt.show()
```



In [ ]: