4/26/23, 3:05 PM Gaussian

Gaussian

```
import numpy as np
In [ ]:
                                             import matplotlib.pyplot as plt
In [ ]: x_axis = np.arange(-100,100,0.1)
                                             print(x_axis)
                                             [-100.
                                                                                           -99.9 -99.8 ...
                                                                                                                                                                                          99.7
                                                                                                                                                                                                                                  99.8
                                                                                                                                                                                                                                                                       99.9]
In [ ]:
                                             mean = np.mean(x_axis)
                                             std = np.std(x_axis)
                                             print(mean,std)
                                             -0.05000000000567525 57.73501970208048
                                             y_axis = 1/(std * np.sqrt(2 * np.pi)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)) * np.exp( - (x_axis - mean)*2 / (2 * std**2)) * np.exp( - (x_axis - mean)*2 / (
In [ ]:
                                             plt.plot(x_axis,y_axis,linewidth=3, color='r')
In [ ]:
                                             plt.show()
                                               0.007
                                               0.006
                                               0.005
                                               0.004
                                               0.003
                                               0.002
                                                                                                      −<del>7</del>5
                                                                                                                                    -50
                                                                                                                                                               -25
                                                                                                                                                                                                                          25
                                                                                                                                                                                                                                                      50
                                                                                                                                                                                                                                                                                  75
                                                                          -100
                                                                                                                                                                                                                                                                                                          100
In [ ]:
```