Assignment 1

Write a Python program to plot the following equations and analyze linear and non-linear properties.

1. $y = ax + b$, **a** and **b** constants, x = [-10, 10]
2. $y = ae^x + b$, **a** and **b** constants, x = [-10, 10]
3. $y = ax^2 + b$, **a** and **b** constants, x = [-10, 10]

IDEA:

1. Use numpy and matplotlib
2. Take **x** as random number in between -10 and 10
3. Take **a** and **b** as random number also
4. Make the equations with those numbers
5. Plot the equations
6. Identify linear and non-linear nature of equations curves

N.B.: Do not copy any code, just make it your own.