EX1-31

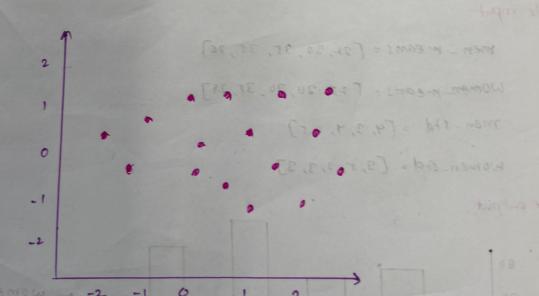
sim: To create a scatter plot using random distributions for both on and y axis to visualize their selations hip pseudocode:

- x impost the matplotlib and numpy libraries
- + Generate random values a and y using normal distribution
- I plot the scatter graph using the generated or and y values
- I Display the plot and are of modern about to talk a stage of

sample input: 2000 2000 at the 2000 same and long 1

y= np. random. normal (0,1,100)

sample output:



Result:

This code was successfully executed and sot the output

```
import matplotlib.pyplot as plt
import numpy as np
# Generating random data for x and y coordinates
x = np.random.rand(50) * 100 # 50 random x-coordinates
y = np.random.rand(50) * 100 # 50 random y-coordinates
# Creating the scatter plot
plt.scatter(x, y, color='green', marker='o', alpha=0.6)
# Adding labels and title
plt.xlabel("X-axis")
plt.ylabel("Y-axis")
plt.title("Scatter Plot with Random Distribution")
# Displaying the plot
plt.show()
```



