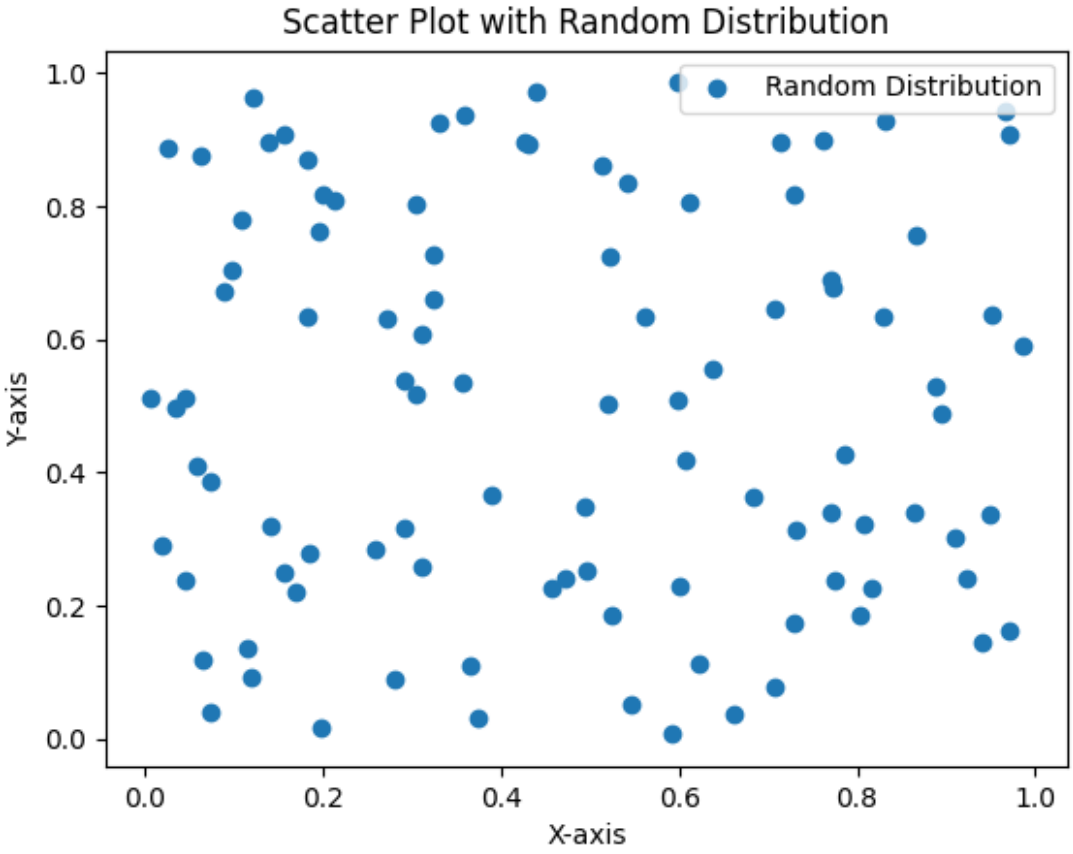
Write a Python program to draw a scatter graph taking a random distribution in X and Y and plotted against each other

PROGRAM:

```
import matplotlib.pyplot as plt

import numpy as np

# Set a random seed for reproducibility

np.random.seed(42)

# Generate random data for X and Y

num_points = 100

random_x = np.random.rand(num_points)

random_y = np.random.rand(num_points)

# Create a scatter plot

plt.scatter(random_x, random_y, label='Random Distribution')

# Set labels and title

plt.xlabel('X-axis')

plt.ylabel('Y-axis')

plt.title('Scatter Plot with Random Distribution')

# Show legend

plt.legend()

# Show the plot

plt.show()
```

OUTPUT:


Scatter Plot with Random Distribution
Random Distribution
Y-axis
X-axis
0.0
0.2
0.4
0.6
0.8
1.0