Write a Python program to draw a scatter plot using random distributions to generate balls of different sizes

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, Y, and sizes

num_balls = 50

random_x = np.random.rand(num_balls)

random_y = np.random.rand(num_balls)

ball_sizes = np.random.randint(10, 100, size=num_balls)  # Random sizes between 10 and 100

# Create a scatter plot with balls of different sizes

plt.scatter(random_x, random_y, s=ball_sizes, alpha=0.7, label='Random Balls')

# Set labels and title

plt.xlabel('X-axis')

plt.ylabel('Y-axis')

plt.title('Scatter Plot with Balls of Different Sizes')

# Show legend

plt.legend()

# Show the plot

plt.show()
```

OUTPUT:

Scatter Plot with Balls of Different Sizes