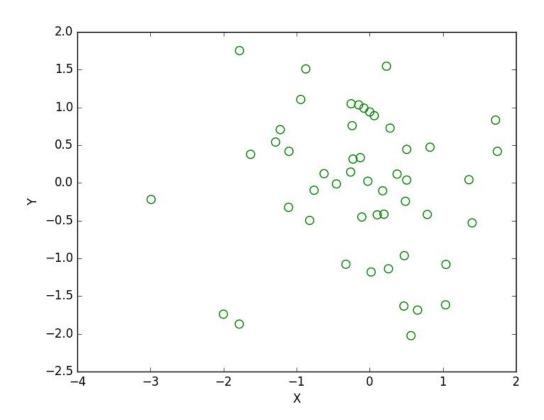
1. Write a Python program to draw a scatter plot with empty circles taking a random distribution in X and Y and plotted against each other.

## Code:

```
import matplotlib.pyplot as plt
import numpy as np
x = np.random.randn(50)
y = np.random.randn(50)
plt.scatter(x, y, s=70, facecolors='none', edgecolors='g')
plt.xlabel("X")
plt.ylabel("Y")
plt.show()
```

## **Output:**



# 2. Write a Python programming to create a pie chart of the popularity of programming Languages..

Sample data:

Programming languages: Java, Python, PHP, JavaScript, C#, C++

Popularity: 22.2, 17.6, 8.8, 8, 7.7, 6.7

#### Code:

```
import matplotlib.pyplot as plt
# Data to plot
languages = 'Java', 'Python', 'PHP', 'JavaScript', 'C#', 'C++'
popuratity = [22.2, 17.6, 8.8, 8, 7.7, 6.7]
colors = ["#1f77b4", "#ff7f0e", "#2ca02c", "#d62728", "#9467bd", "#8c564b"]
# explode 1st slice
explode = (0.1, 0, 0, 0, 0, 0, 0)
# Plot
plt.pie(popuratity, explode=explode, labels=languages, colors=colors, autopct='%1.1f%%', shadow=True, startangle=140)
plt.axis('equal')
plt.show()
```

### **Output:**

