A) Generate a random array of 50 integers and display them using a line chart, scatter plot, histogram and box plot. Apply appropriate color, labels and styling options.

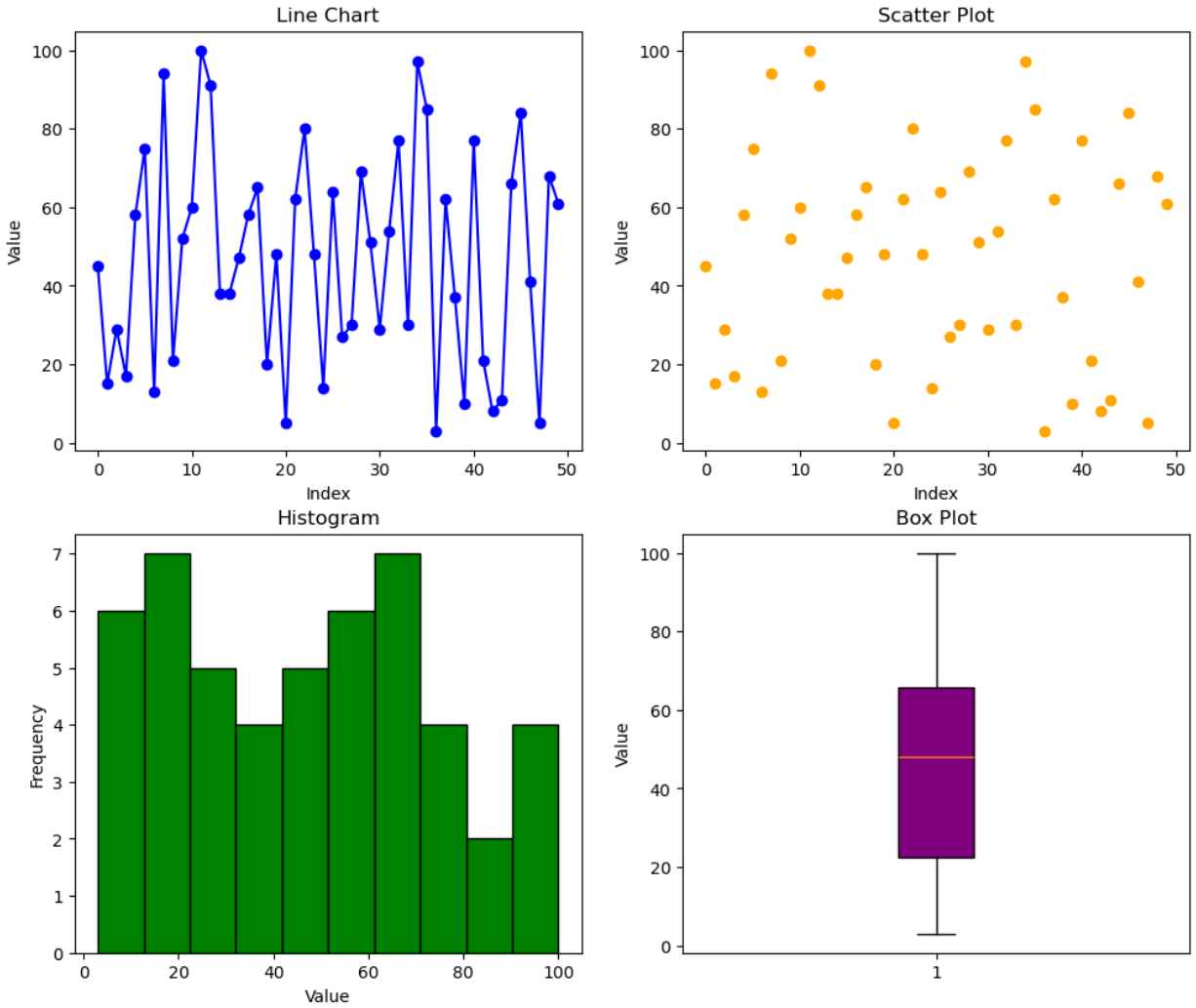
In [3]:
```
import numpy as np
import matplotlib.pyplot as plt
rn = np.random.randint(1, 101, size=50)

fig,axs = plt.subplots(2, 2, figsize=(12, 10))
axs[0,0].plot(rn, marker='o', linestyle='-', color='blue')
axs[0,0].set_title('Line Chart')
axs[0,0].set_xlabel('Index')
axs[0,0].set_ylabel('Value')

axs[0,1].scatter(range(len(rn)), rn, color='orange')
axs[0,1].set_title('Scatter Plot')
axs[0,1].set_xlabel('Index')
axs[0,1].set_ylabel('Value')

axs[1,0].hist(rn, bins=10, color='green', edgecolor='black')
axs[1,0].set_title('Histogram')
axs[1,0].set_xlabel('Value')
axs[1,0].set_ylabel('Frequency')

axs[1,1].boxplot(rn, patch_artist=True, boxprops=dict(facecolor='purple', color='black'))
axs[1,1].set_title('Box Plot')
axs[1,1].set_ylabel('Value')
plt.show()
```



B) Write a Python program to print the shape, number of rows-columns, data types, feature names and the description

of the data(Use User_Data.csv)

In [61]:
```
import pandas as pd

data = pd.read_csv('DATA.csv')
print(data.shape)
print(data.shape[0], data.shape[1])
print(data.dtypes)
print(data.columns.tolist())
print(data.describe())
```

```
(22, 3)
22 3
Name         object
Age           int64
Income($)     int64
dtype: object
['Name', 'Age', 'Income($)']
             Age      Income($)
count  22.000000      22.000000
mean   34.818182   90431.818182
std     5.901060   43505.964412
min    26.000000   45000.000000
25%    29.000000   58500.000000
50%    36.500000   67500.000000
75%    39.750000  135250.000000
max    43.000000  162000.000000
```