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 [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
data=np.random.randint(1,100,50)
data
```

Out[1]:

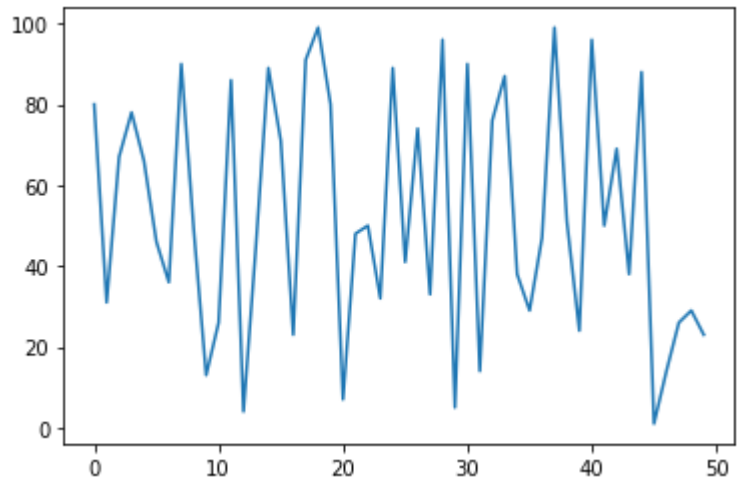
```
array([80, 31, 67, 78, 66, 46, 36, 90, 49, 13, 26, 86,  4, 45, 89, 71, 23,
       91, 99, 80,  7, 48, 50, 32, 89, 41, 74, 33, 96,  5, 90, 14, 76, 87,
       38, 29, 47, 99, 51, 24, 96, 50, 69, 38, 88,  1, 14, 26, 29, 23])
```

In [2]:

```
plt.plot(data)
```

Out[2]:

```
[<matplotlib.lines.Line2D at 0x76dc990fa0>]
```

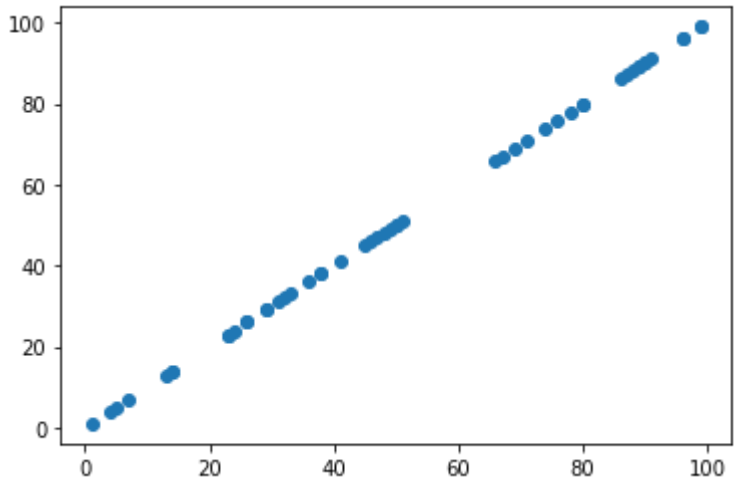


In [3]:

```
plt.scatter(data,data)
```

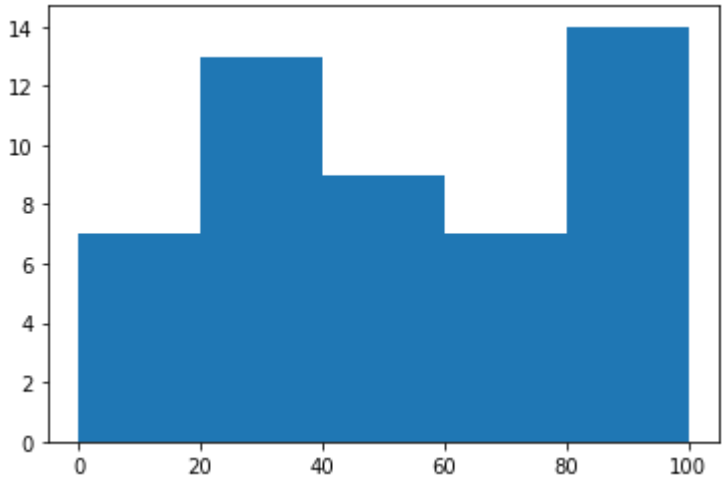
Out[3]:

```
<matplotlib.collections.PathCollection at 0x76dca30fd0>
```



In [4]:

```
plt.hist(data,bins = [0,20,40,60,80,100])
plt.show()
```

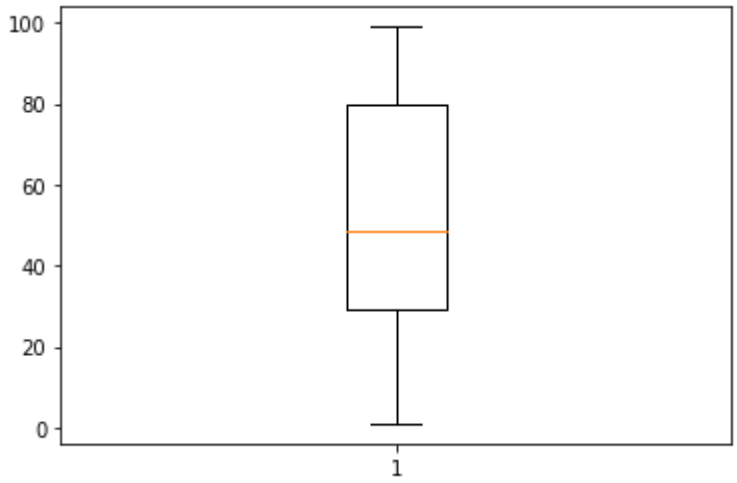


In [5]:

```
plt.boxplot(data)
```

Out[5]:

```
{'whiskers': [<matplotlib.lines.Line2D at 0x76dcafff40>,
  <matplotlib.lines.Line2D at 0x76dcb102e0>],
 'caps': [<matplotlib.lines.Line2D at 0x76dcb10640>,
  <matplotlib.lines.Line2D at 0x76dcb109a0>],
 'boxes': [<matplotlib.lines.Line2D at 0x76dcaffbe0>],
 'medians': [<matplotlib.lines.Line2D at 0x76dcb10d00>],
 'fliers': [<matplotlib.lines.Line2D at 0x76dcb1d040>],
 'means': []}
```



In [ ]:

In [ ]: