In [7]:
```python
student_name = "Zakarya Guerinat"  # fill your name
student_id = "217090531"  # fill your student ID
print("Student name: " + student_name)
print("Student ID: " + student_id)
```
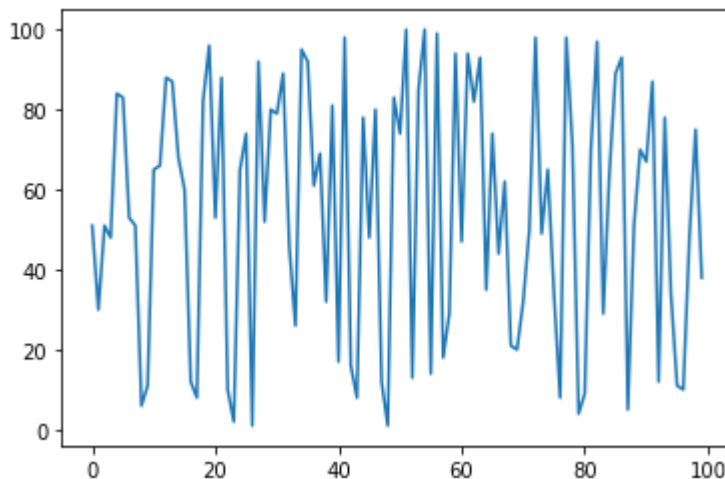
Student name: Zakarya Guerinat
Student ID: 217090531

In [2]:
```python
import random
import matplotlib.pyplot as plt

n_values = 100
y_values = []

# Create data (y_values) randomly between 1 and 100.
for i in range(n_values):
    y_values.append(random.randint(1, 100))

x_values = range(n_values)  # X is sequence of values 0-99
plt.plot(x_values, y_values)
plt.show()
```
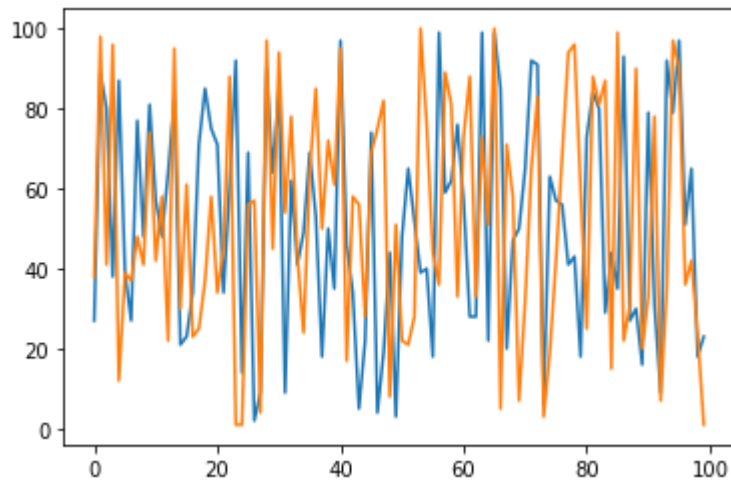

In [8]:
```python
# Plot 2 variables
#

n_values = 100
y_values_1 = []
y_values_2 = []

# Create data (y_values) randomly between 1 and 100.
for i in range(n_values):
    y_values_1.append(random.randint(1, 100))
    y_values_2.append(random.randint(1, 100))

x_values = range(n_values)  # X is sequence of values 0-99
plt.plot(x_values, y_values_1)
plt.plot(x_values, y_values_2)  # call plot again draws in the same graph.
plt.show()
```
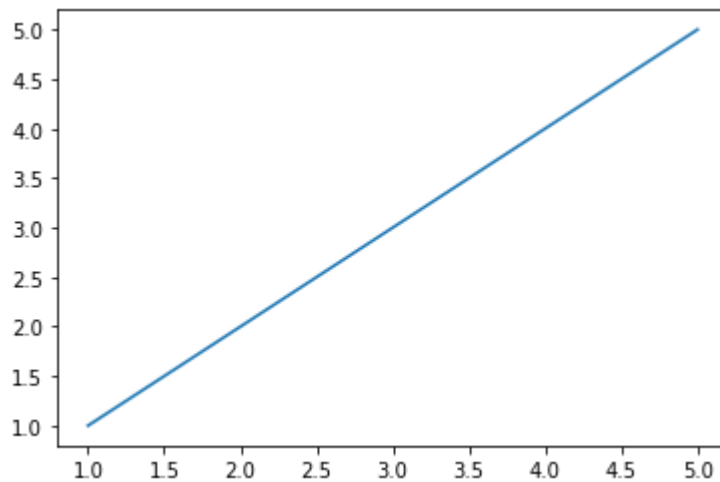
In [9]:
```python
#
# Activity 1: Create data so that the plot draws an
# ascending line (y_values increase at any rate).
#

import matplotlib.pyplot as plt

x_values = [1, 2, 3, 4, 5]
y_values = [1, 2, 3, 4, 5]

plt.plot(x_values, y_values)
plt.show()
```


In [12]:
```python
#
# Activity 2: Create data so that the plot draws a
# descending line (y_values decrease at any rate).
#

import matplotlib.pyplot as plt

x_values = [1, 2, 3, 4, 5]
y_values = [5, 4, 3, 2, 1]

plt.plot(x_values, y_values)
plt.show()
```
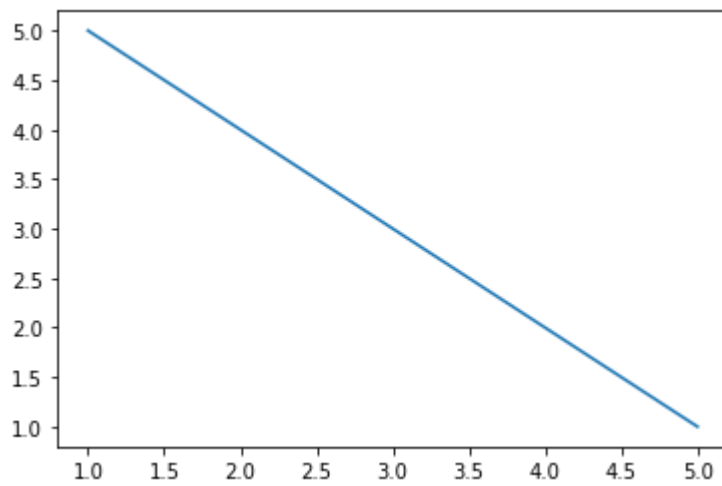
In [13]:
```python
#
# Activity 3: Create data so that the plot draws a
# wave. You can consider using Python's math libarary, which has
# a sin function (detail https://www.w3schools.com/python/ref_math_sin.asp).
#

import matplotlib.pyplot as plt
import math

x_values = [i for i in range(100)]
y_values = [math.sin(i) for i in x_values]

plt.plot(x_values, y_values)
plt.show()
```