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In [1]: import numpy as np
import matplotlib.pyplot as plt

# Sigmoid function
def sigmoid(x):
    return 1 / (1 + np.exp(-x))
```

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In [2]: def tanh(x):
    return np.tanh(x)
```

```
In [3]: x = np.random.randn(100)
```

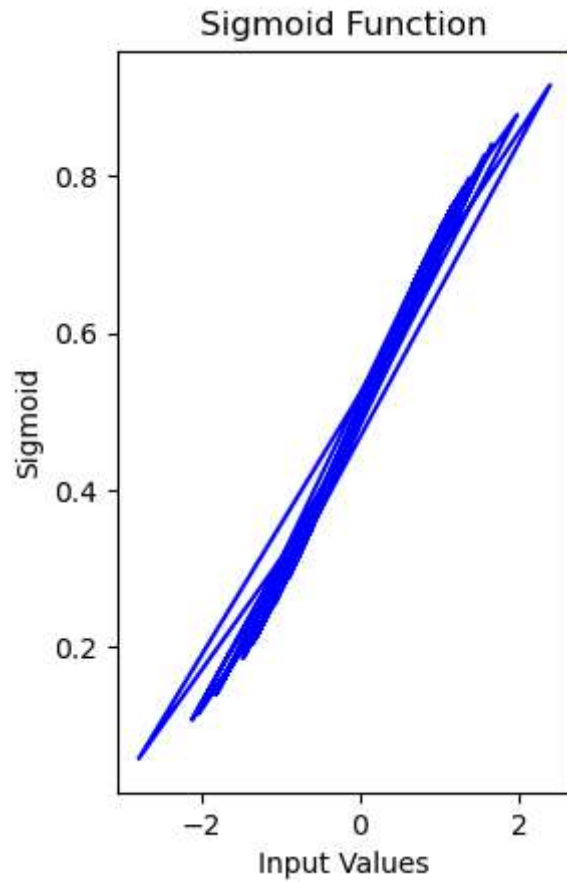
```
In [4]: sigmoid_values = sigmoid(x)
tanh_values = tanh(x)
```

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In [5]: plt.figure(figsize=(10, 5))
```

```
Out[5]: <Figure size 1000x500 with 0 Axes>
<Figure size 1000x500 with 0 Axes>
```

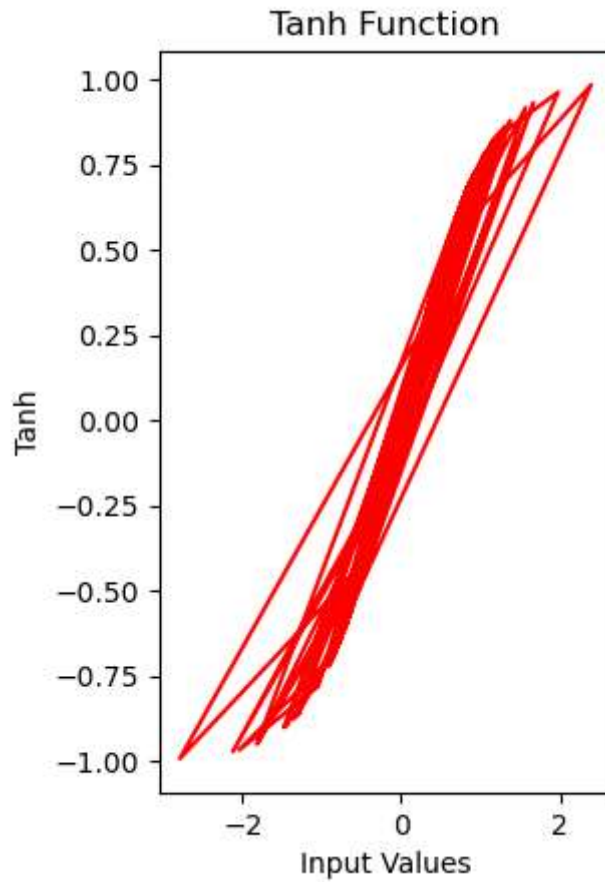
```
In [6]: plt.subplot(1, 2, 1)
plt.plot(x, sigmoid_values, 'b', label="Sigmoid")
plt.title('Sigmoid Function')
plt.xlabel('Input Values')
plt.ylabel('Sigmoid')
```

Out[6]: Text(0, 0.5, 'Sigmoid')



```
In [7]: plt.subplot(1, 2, 2)
plt.plot(x, tanh_values, 'r', label="Tanh")
plt.title('Tanh Function')
plt.xlabel('Input Values')
plt.ylabel('Tanh')
```

Out[7]: Text(0, 0.5, 'Tanh')



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In [8]: plt.tight_layout()
plt.show()
```

<Figure size 640x480 with 0 Axes>

In []: