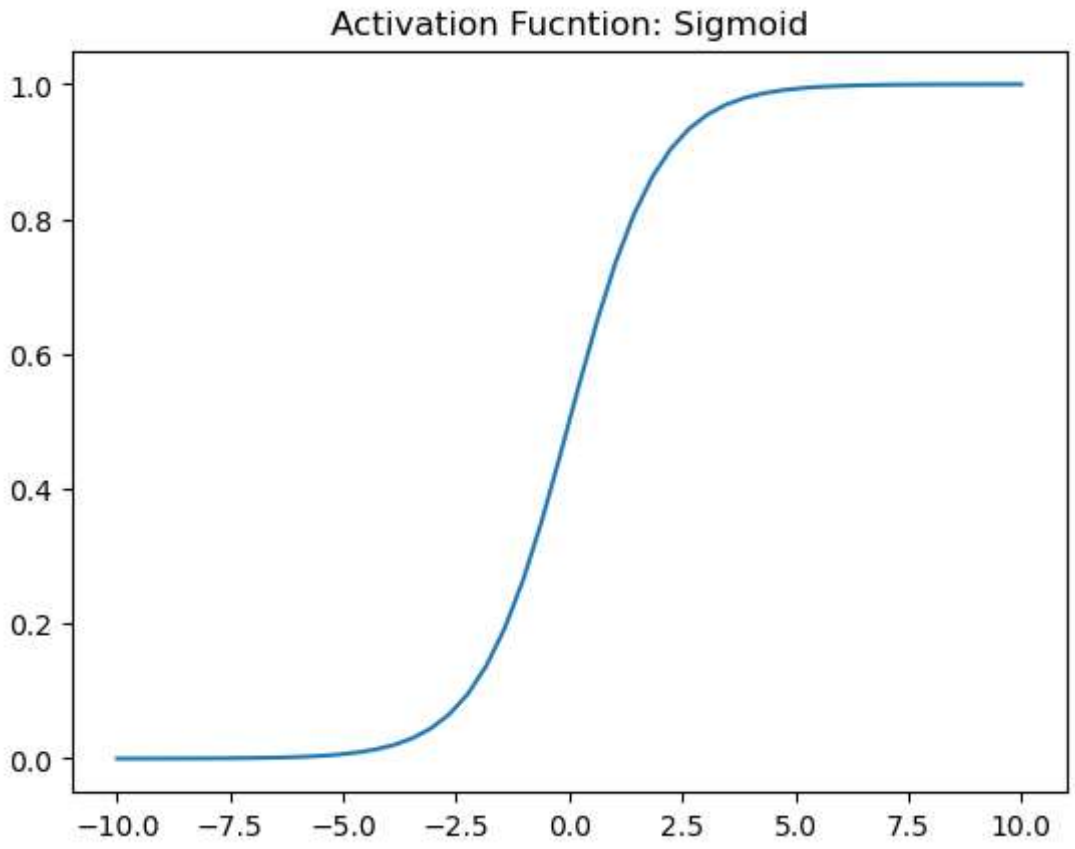
Assignment 1

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

In [2]:
```
1 #sigmoid activation function
2 def sig(x):
3  return 1/(1 + np.exp(-x))
```

In [3]:
```
1 x = np.linspace(-10, 10, 50)
2 p = sig(x)
3 plt.plot(x, p)
4 plt.title("Activation Fucntion: Sigmoid")
5 plt.show()
```



In [4]:
```
1 #tanh activation function
2 def tanh(x):
3     ''' It returns the value (1-exp(-2x))/(1+exp(-2x)) and the value retu
4     return np.tanh(x)
```

In [7]:

```
1 x = np.linspace(-10, 10)
2 plt.plot(x, tanh(x))
3 plt.title('Activation Function: Tanh')
4 plt.show()
```