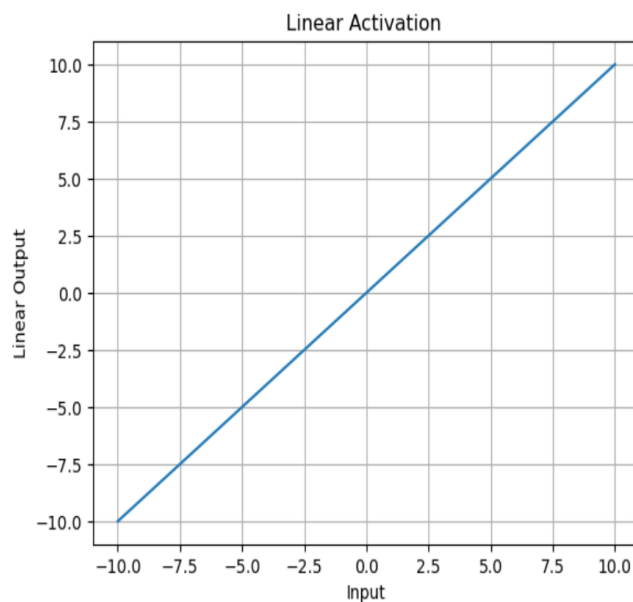
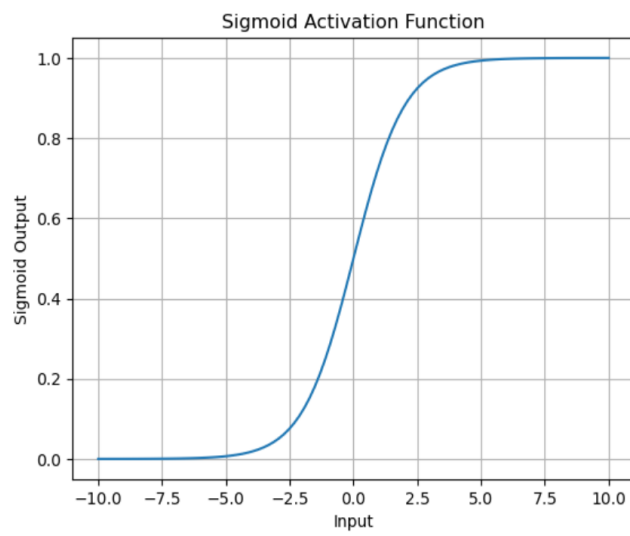


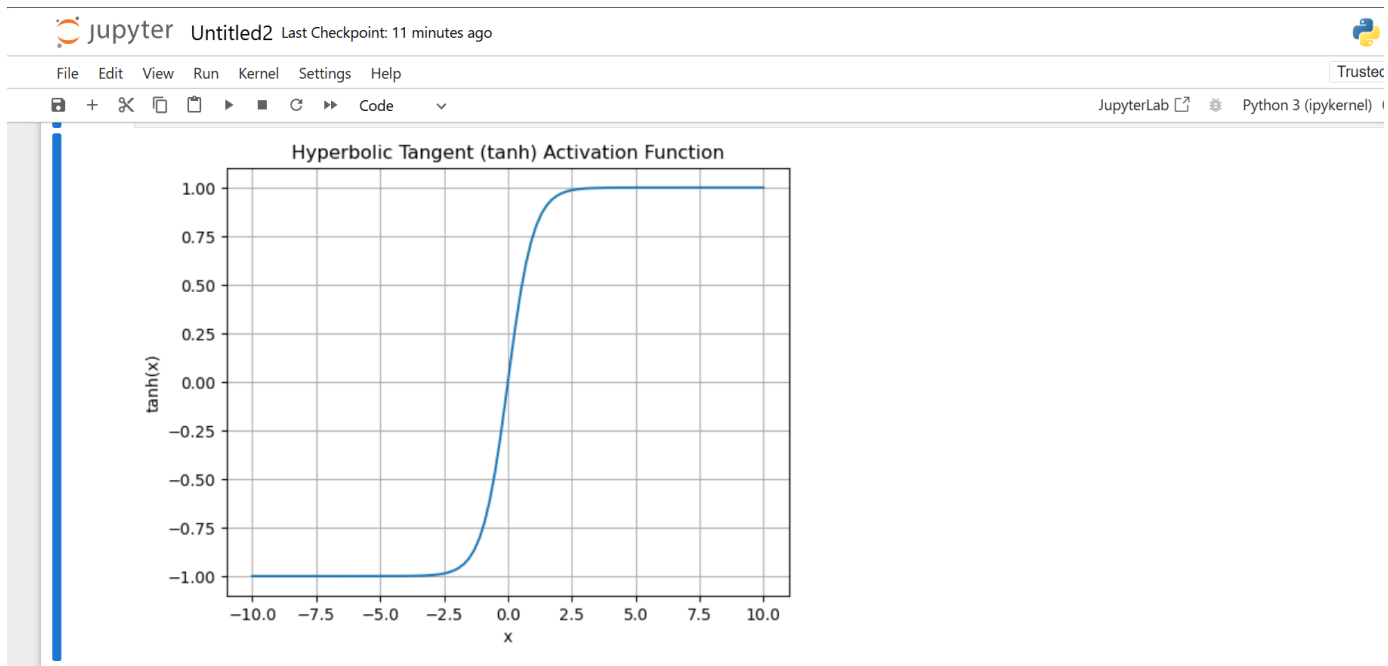
```
[10]: import numpy as np
import matplotlib.pyplot as plt
def plot_linear():
    x = np.linspace(-10, 10, 100)
    y = x
    plt.plot(x, y)
    plt.xlabel('Input')
    plt.ylabel('Linear Output')
    plt.title('Linear Activation ')
    plt.grid(True)
    plt.show()
plot_linear()
```



```
[13]: def plot_sigmoid():
    x = np.linspace(-10, 10, 100)
    y = 1 / (1 + np.exp(-x))
    plt.plot(x, y)
    plt.xlabel('Input')
    plt.ylabel('Sigmoid Output')
    plt.title('Sigmoid Activation Function')
    plt.grid(True)
    plt.show()
plot_sigmoid()
```



```
[8]: def plot_tanh():
      x = np.linspace(-10, 10, 100)
      tanh = np.tanh(x)
      plt.plot(x, tanh)
      plt.title("Hyperbolic Tangent (tanh) Activation Function")
      plt.xlabel("x")
      plt.ylabel("tanh(x)")
      plt.grid(True)
      plt.show()
      plot_tanh()
```



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JupyterLab Python 3 (ipykernel)

```
[9]: def plot_relu():
    x = np.linspace(-10, 10, 100)
    relu = np.maximum(0, x)
    plt.plot(x, relu)
    plt.title("ReLU Activation Function")
    plt.xlabel("x")
    plt.ylabel("ReLU(x)")
    plt.grid(True)
    plt.show()
plot_relu()
```

