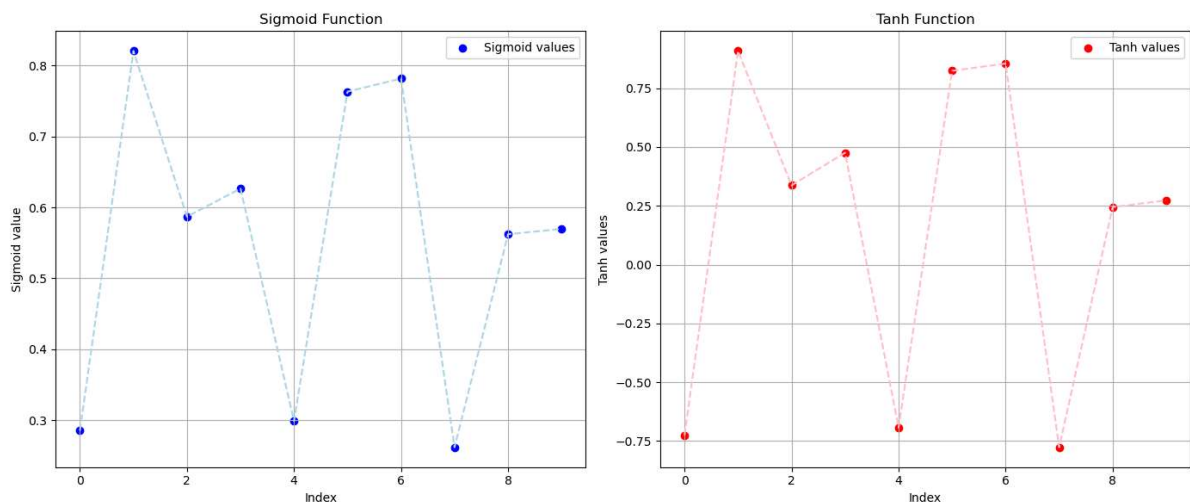


```

In [3]: import numpy as np
import matplotlib.pyplot as plt
#Define the sigmoid function
def sigmoid(x):
    return 1/(1+np.exp(-x))
#Define the tanh function
def tanh(x):
    return np.tanh(x)
#generation of random values
random_values=np.random.randn(10)
#calculate the sigmoid and tanh(hyperbolic tangent) of the random values
sigmoid_values=sigmoid(random_values)
tanh_values=tanh(random_values)
#genertaion indices for x-axis
indices=np.arange(len(random_values))
#plotting
plt.figure(figsize=(14,6))
#plot for sigmoid values
plt.subplot(1,2,1)
plt.scatter(indices,sigmoid_values,color='blue',label='Sigmoid values')
plt.plot(indices,sigmoid_values,color='lightblue',linestyle='--')
plt.title('Sigmoid Function')
plt.xlabel('Index')
plt.ylabel('Sigmoid value')
plt.grid(True)
plt.legend()
#plot for tanh values
plt.subplot(1,2,2)
plt.scatter(indices,tanh_values,color='red',label='Tanh values')
plt.plot(indices,tanh_values,color='pink',linestyle='--')
plt.title('Tanh Function')
plt.xlabel('Index')
plt.ylabel('Tanh values')
plt.grid(True)
plt.legend()

plt.tight_layout()
plt.show()

```



In []: