

## ▼ Sigmoid Function

```
import warnings
warnings.filterwarnings('ignore')
```

## ▼ I. Sigmoid Activation

### ▼ 1) sigmoid( ) 정의

```
import numpy as np

def sigmoid(x):
    y_hat = 1 / (1 + np.exp(-x))
    return y_hat
```

### ▼ 2) sigmoid( ) 실행

```
sigmoid(0)
```

0.5

```
sigmoid(100000000)
```

1.0

```
sigmoid(-100000000)
```

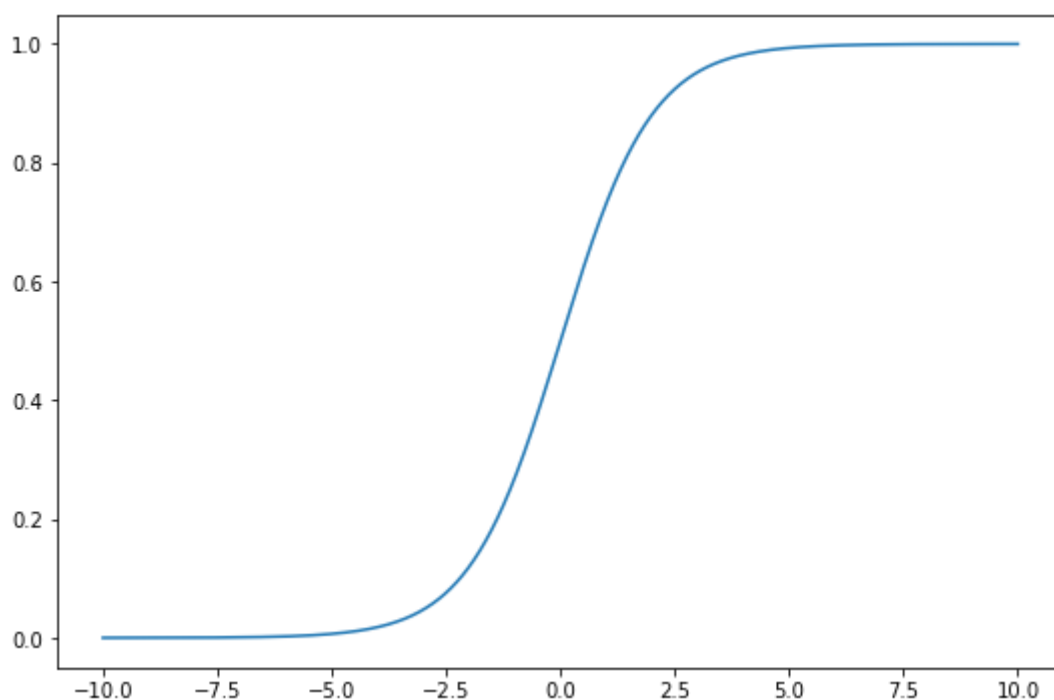
0.0

### ▼ 3) sigmoid( ) 시각화

```
import matplotlib.pyplot as plt

n = np.linspace(-10.0, 10.0, 2000)

plt.figure(figsize = (9, 6))
plt.plot(n, sigmoid(n))
plt.show()
```



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The End

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