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)
```
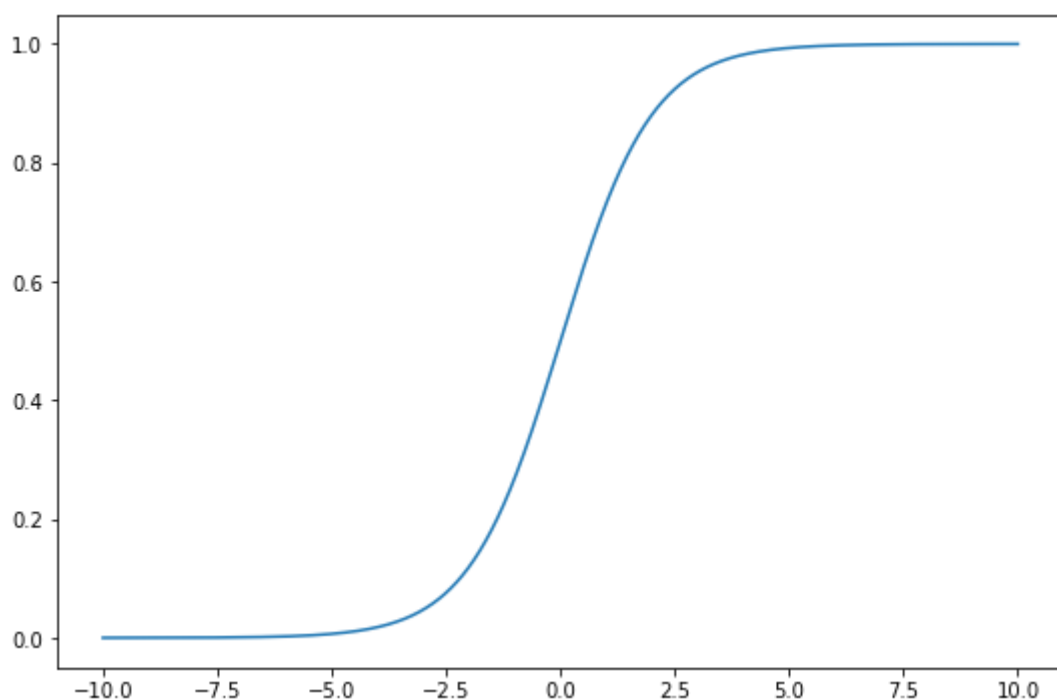
```
1.0
```

```
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()
```

#

#

#

The End

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#

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