In [1]:

```python
import numpy as np
```

In [2]:

```python
def sigmoid(x):
  # Our activation function: f(x) = 1 / (1 + e^(-x))
  return 1 / (1 + np.exp(-x))
```

In [3]:

```python
class Neuron:
  def __init__(self, weights, bias):
    self.weights = weights
    self.bias = bias

  def feedforward(self, inputs):
    # Weight inputs, add bias, then use the activation function
    total = np.dot(self.weights, inputs) + self.bias
    return sigmoid(total)
```

In [4]:

```python
weights = np.array([0, 1]) # w1 = 0, w2 = 1
bias = 4                   # b = 4
```

In [5]:

```python
n = Neuron(weights, bias)
x = np.array([2, 3])        # x1 = 2, x2 = 3
print(n.feedforward(x))     # 0.9990889488055994
```

0.9990889488055994

In [6]: