

The neuron

# The Neuron

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## The Neuron

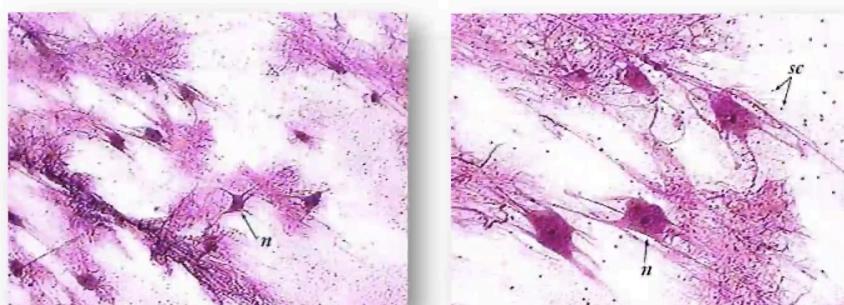
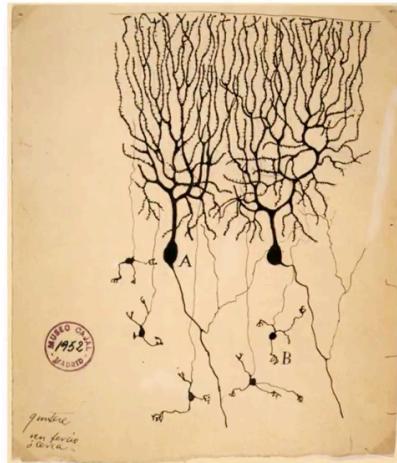


Image Source: [www.austincc.edu](http://www.austincc.edu)

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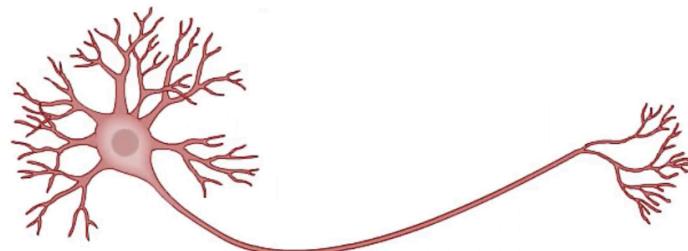


*Image Source: Wikipedia*

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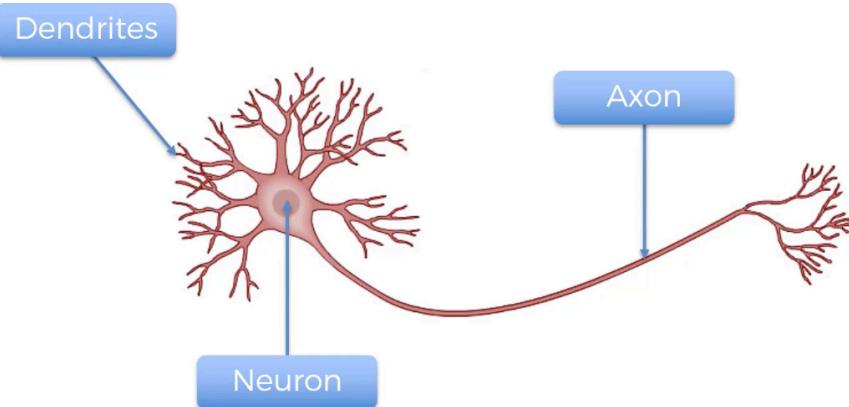


*Image Source: Wikipedia*

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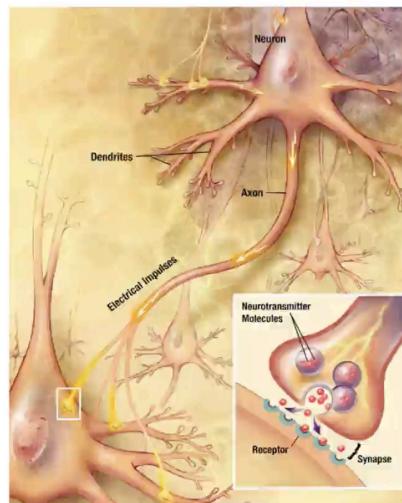
*Image Source: Wikipedia*

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Dendrites are like receiver and axons are like transmitters.

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*Image Source: Wikipedia*

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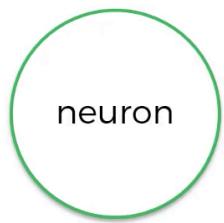
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In here you can see that the dendrites are connected to other axons and the signal from this axon goes to other dendrites.

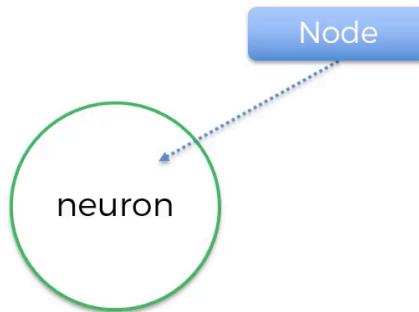
Neurons are not physically connected to each other and you can see it from small picture. The distance is called synapse.

The inputs in human neurons is anything like see, feel, touch, hear and so on.

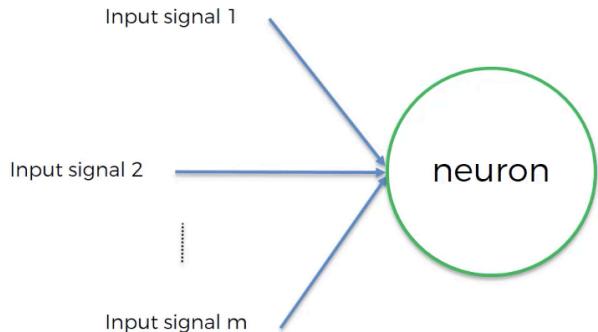
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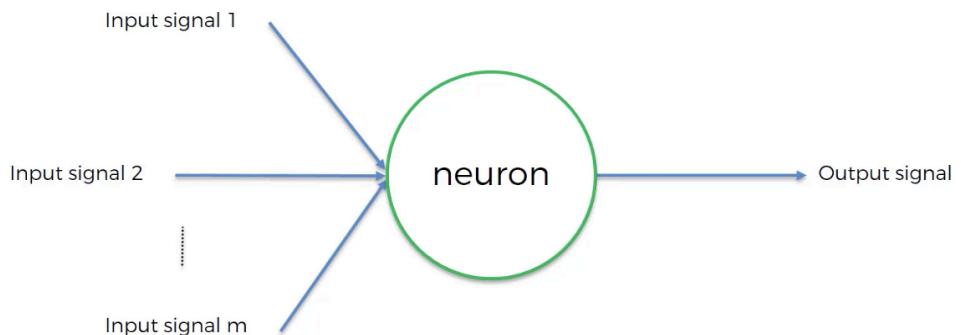
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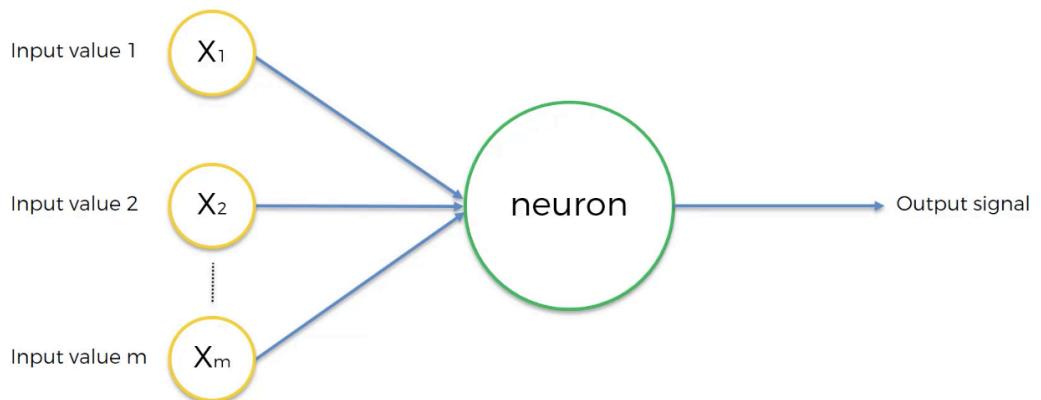
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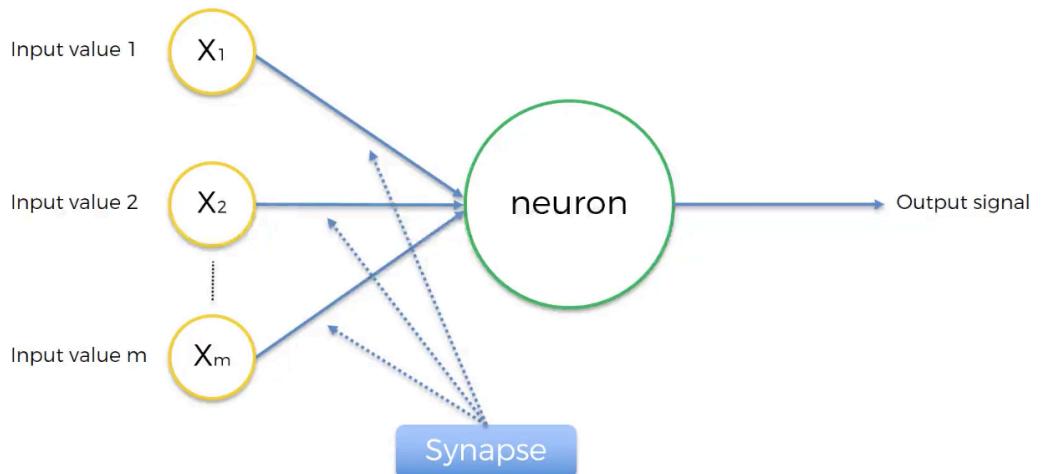
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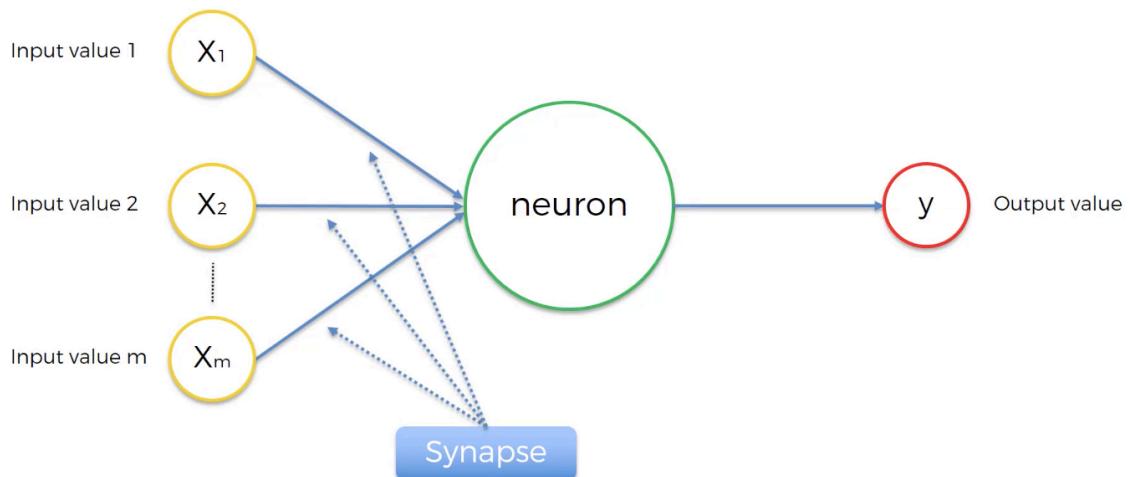
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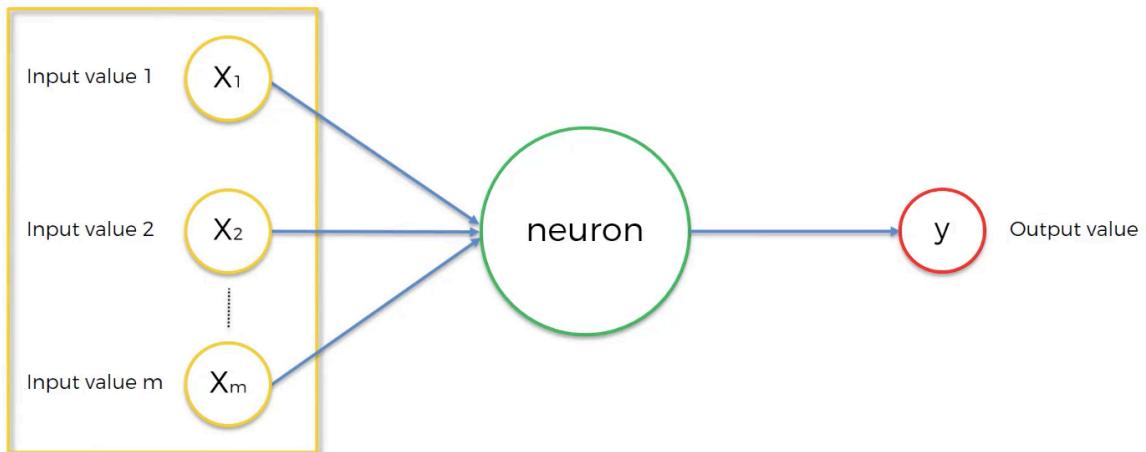
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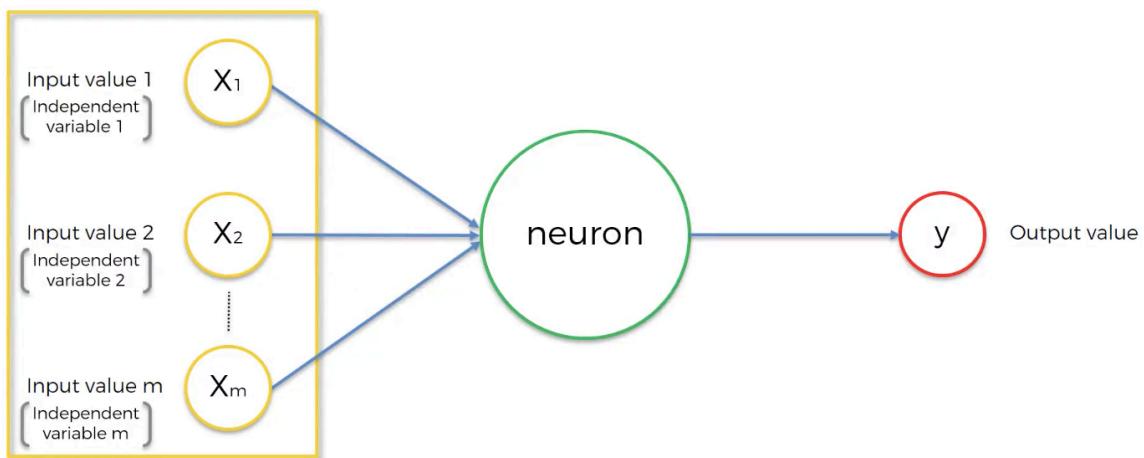
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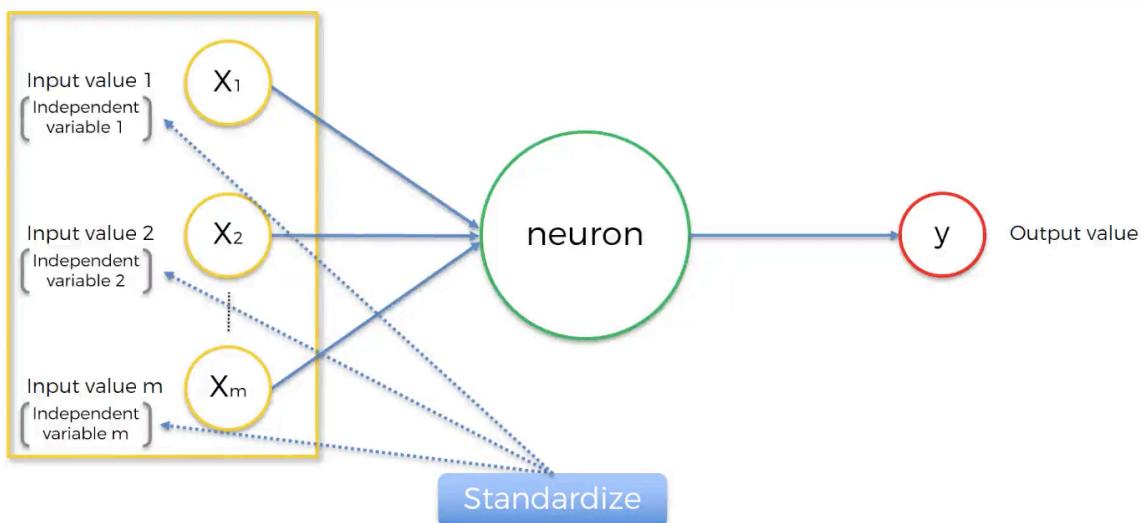
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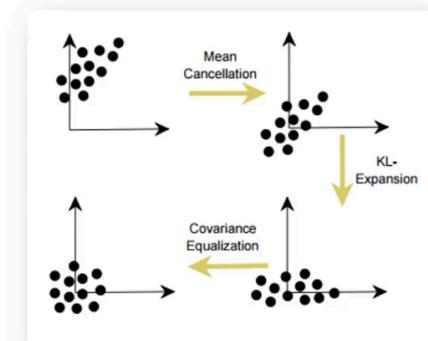
Sometimes instead of Standardize is Normalize.

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Additional Reading:

*Efficient BackProp*

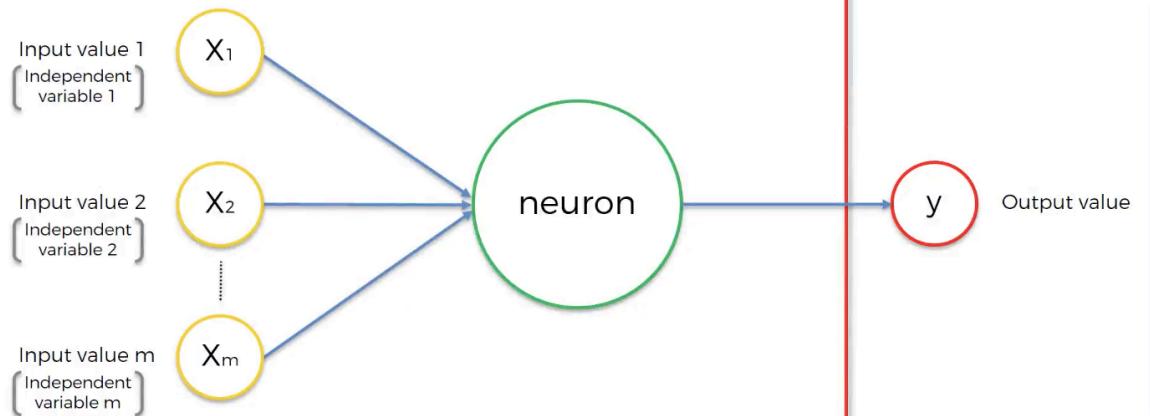
By Yann LeCun et al. (1998)



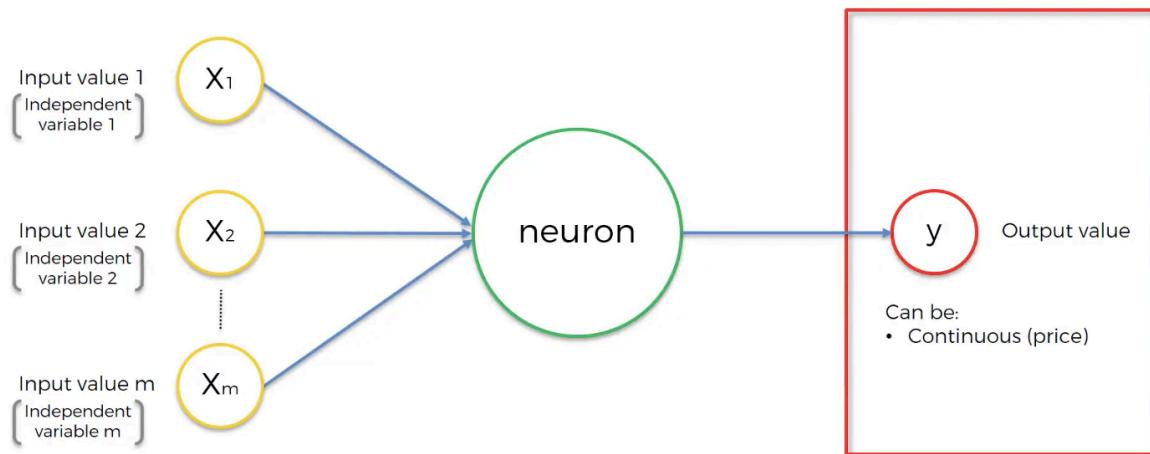
Link:

<http://yann.lecun.com/exdb/publis/pdf/lecun-98b.pdf>

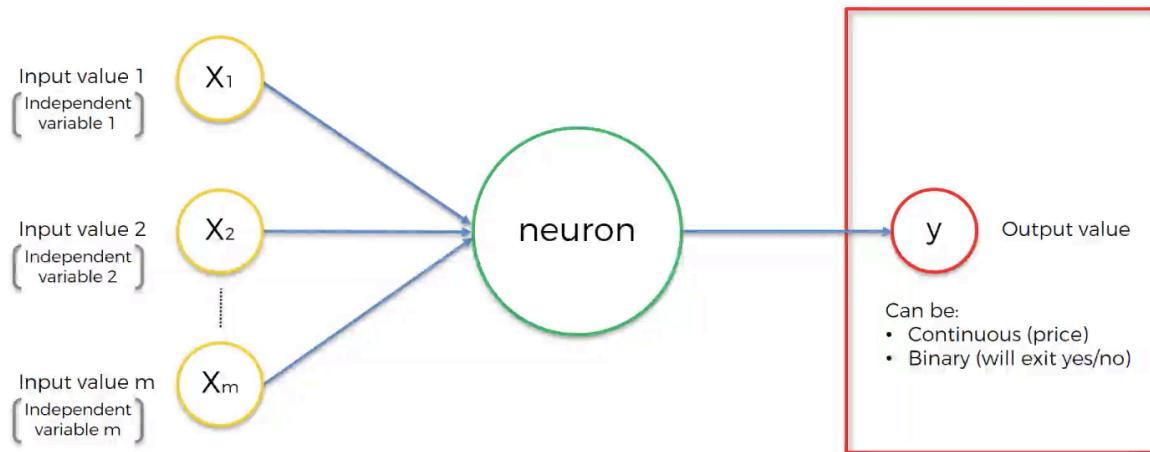
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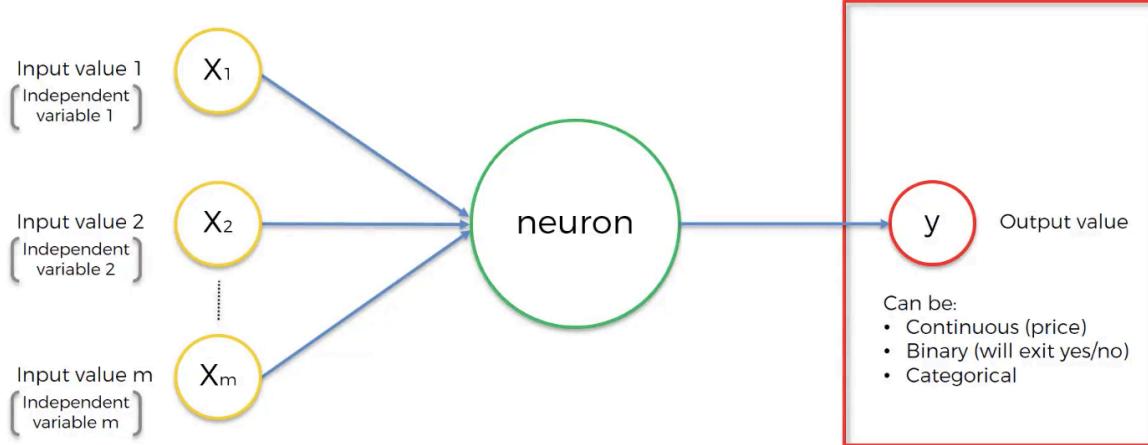
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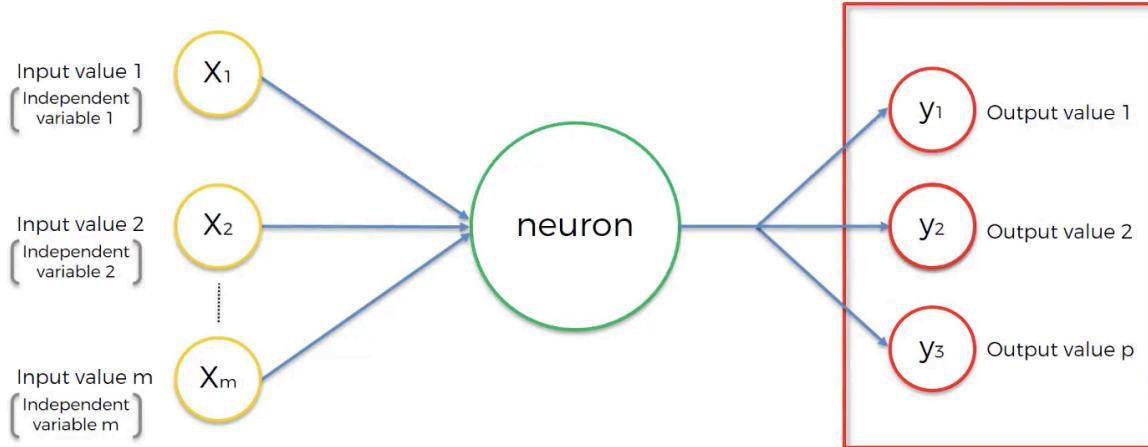
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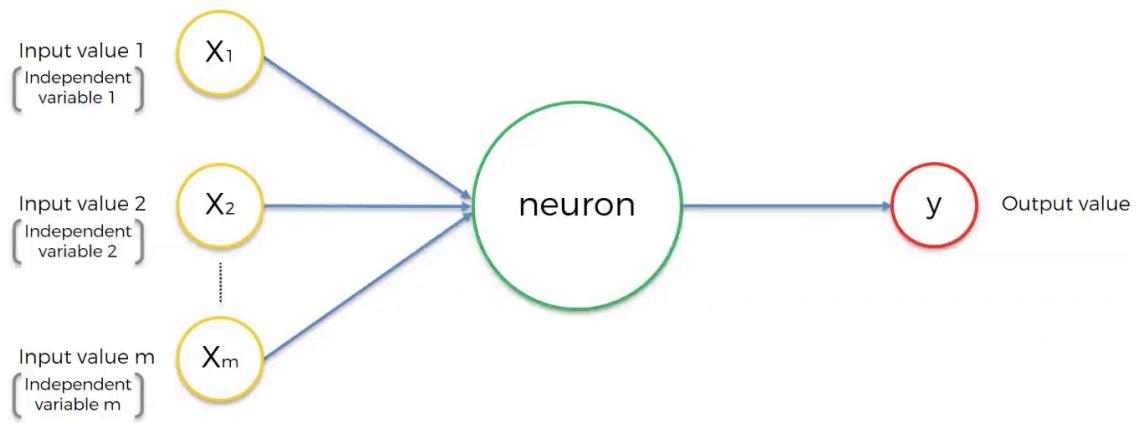
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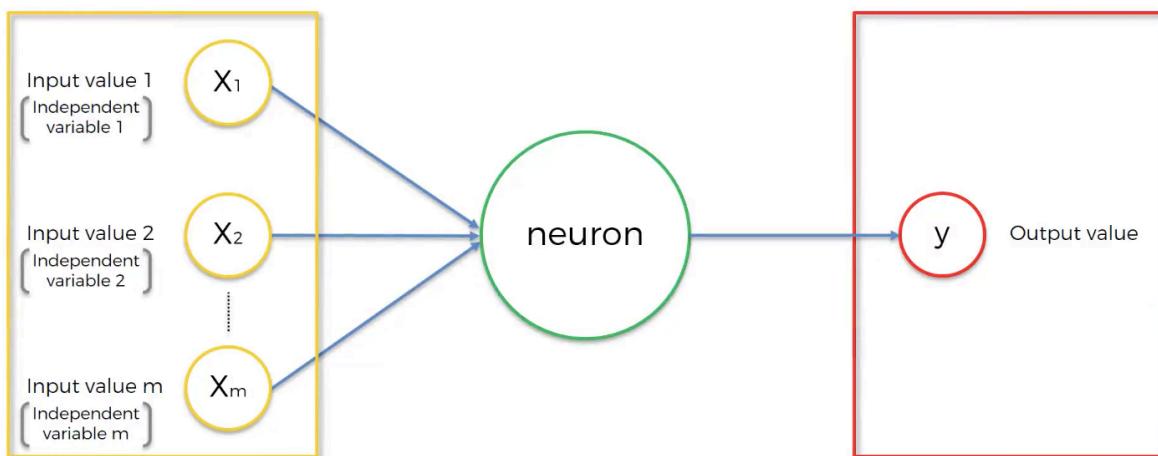
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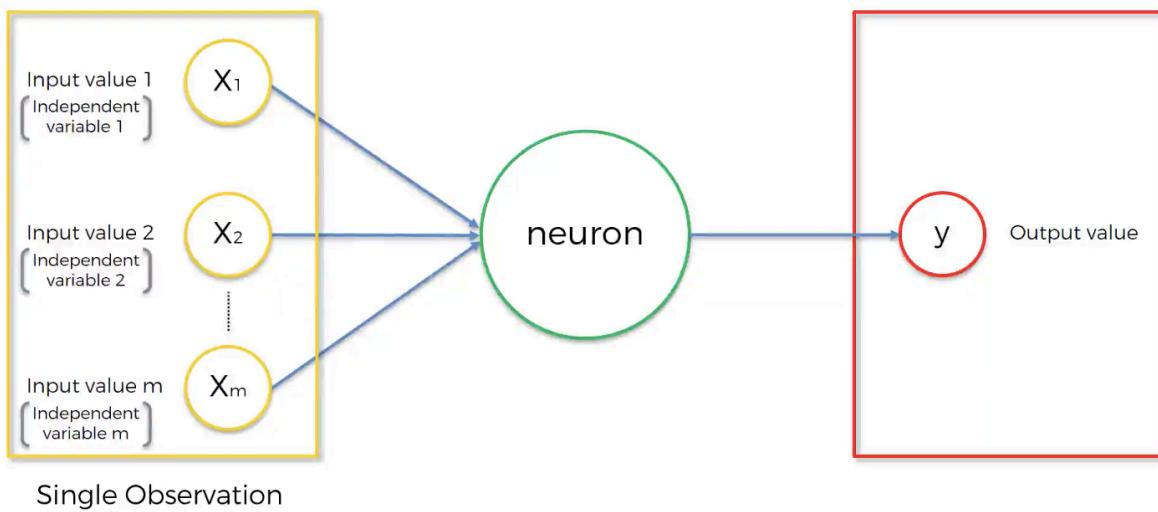
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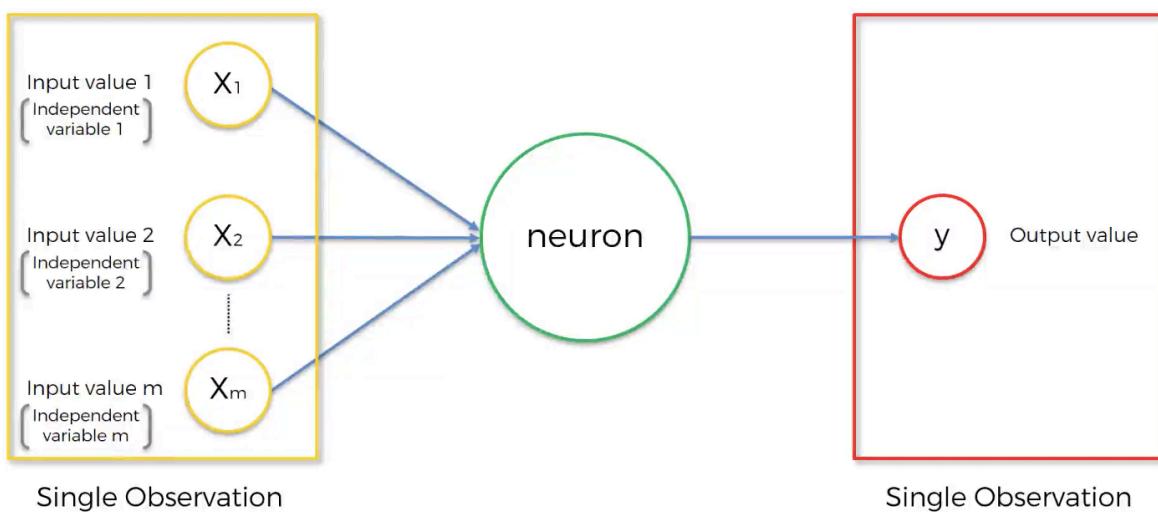
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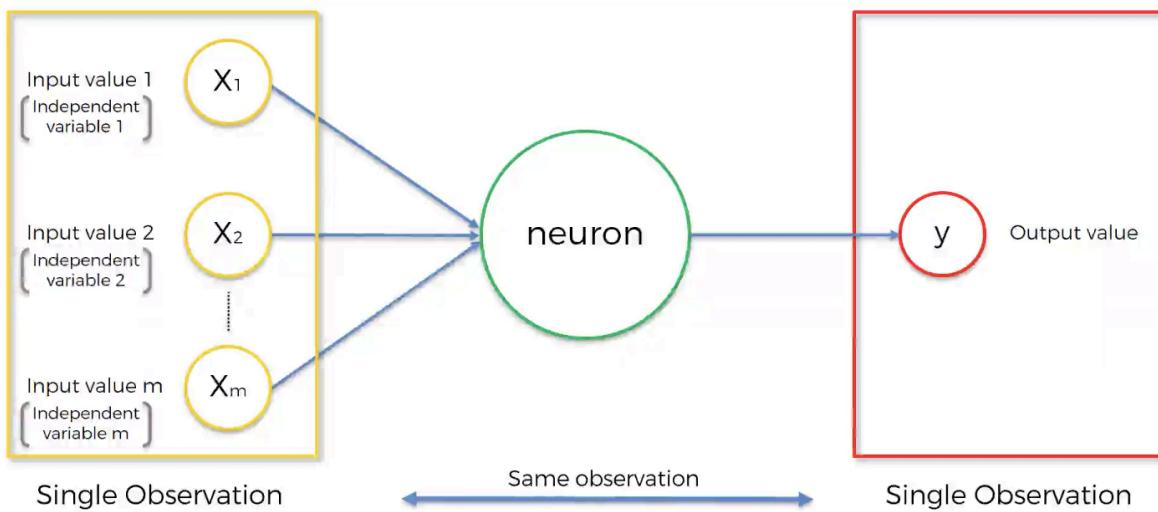
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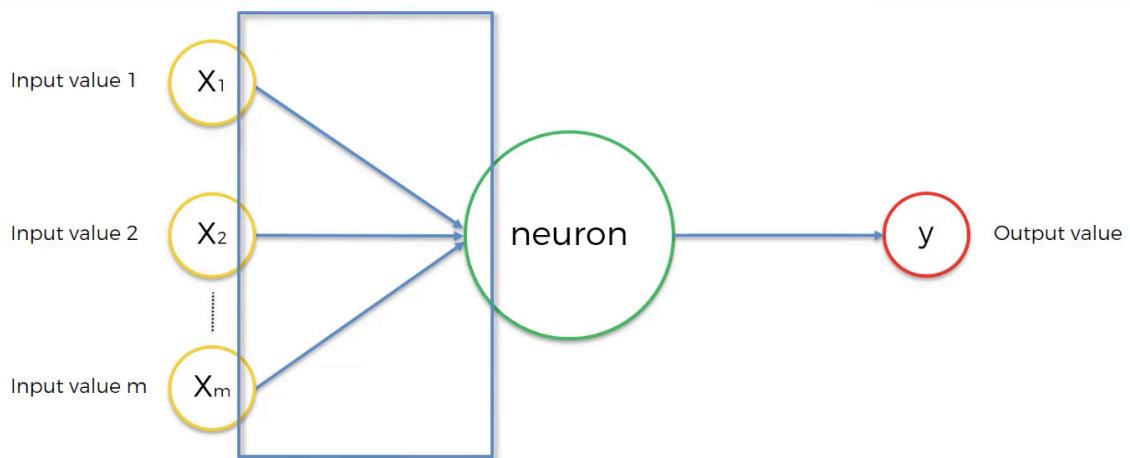
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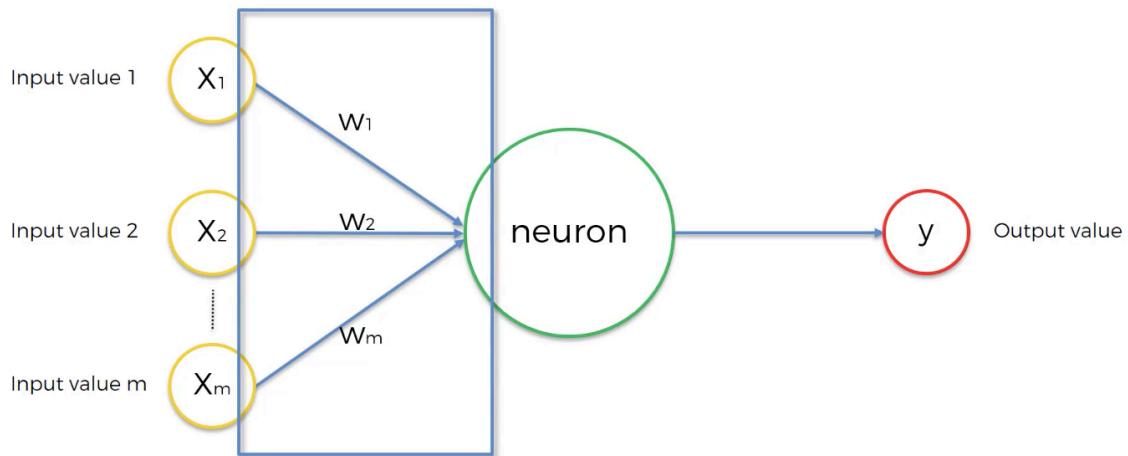
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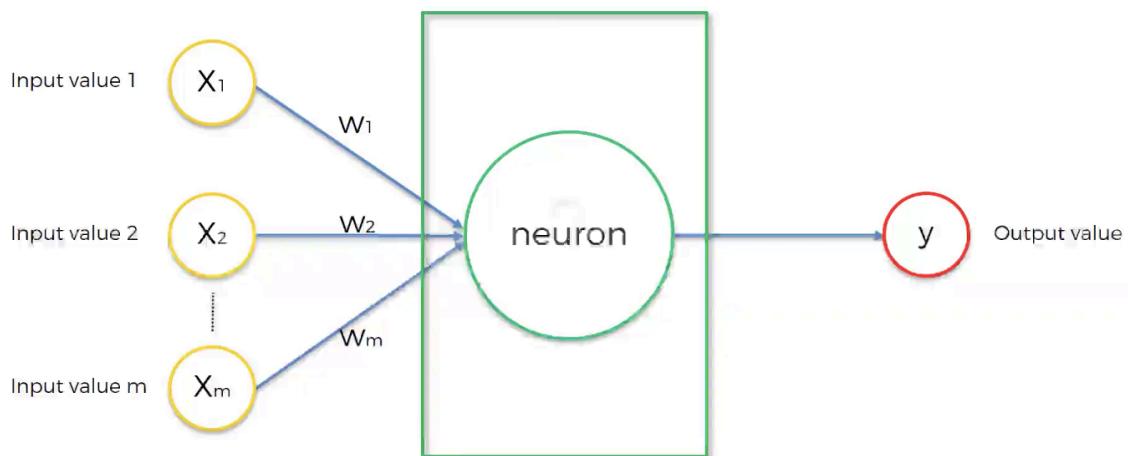


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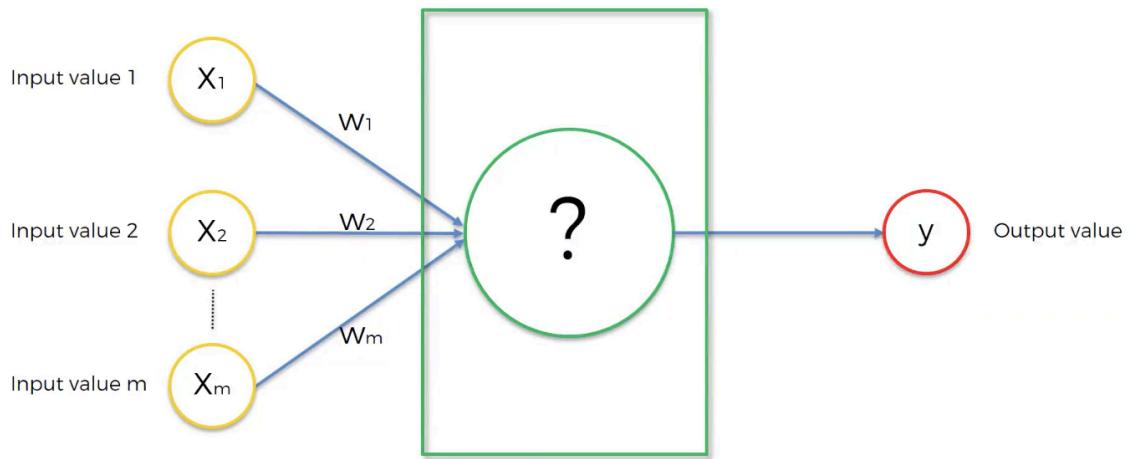


W stands for weights and they are crucial because they will specify what signals are important to neurons and what not and which signal pass along to neuron.

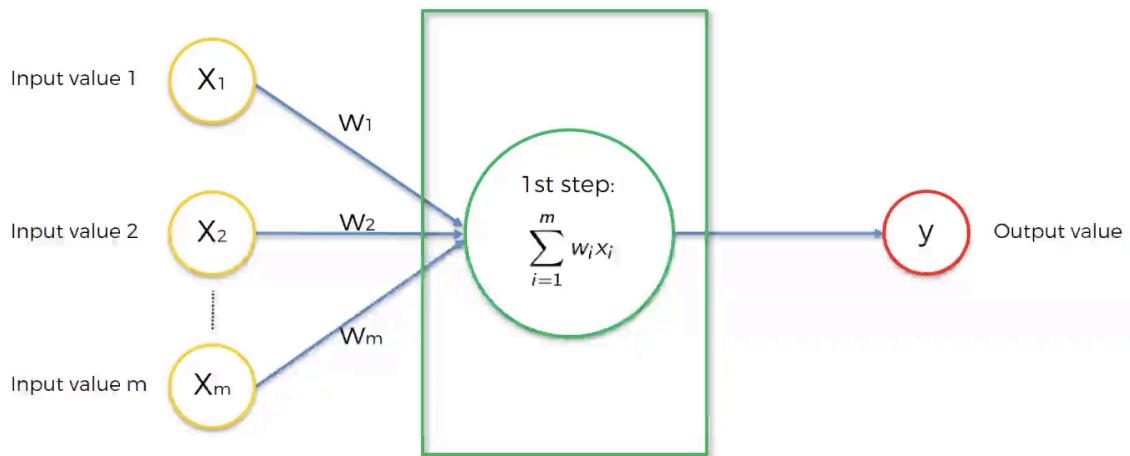
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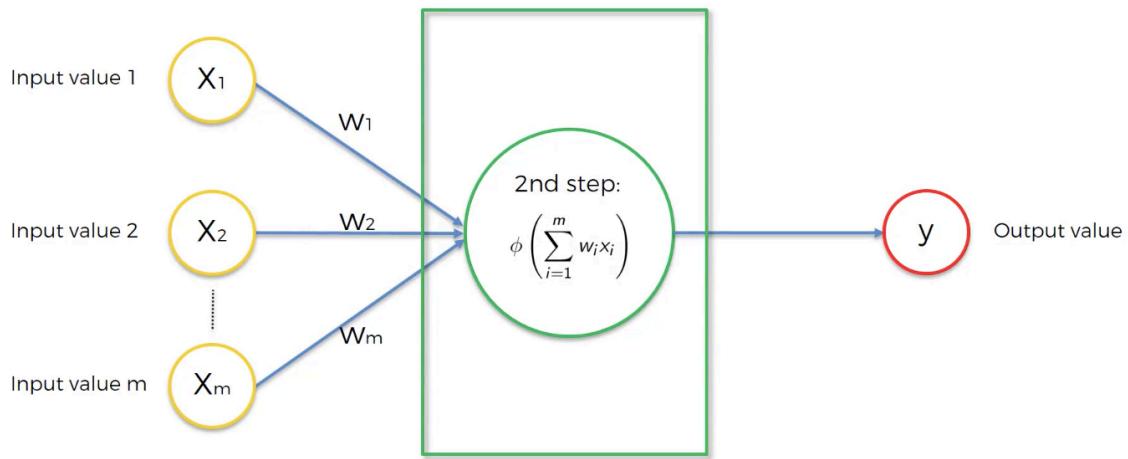
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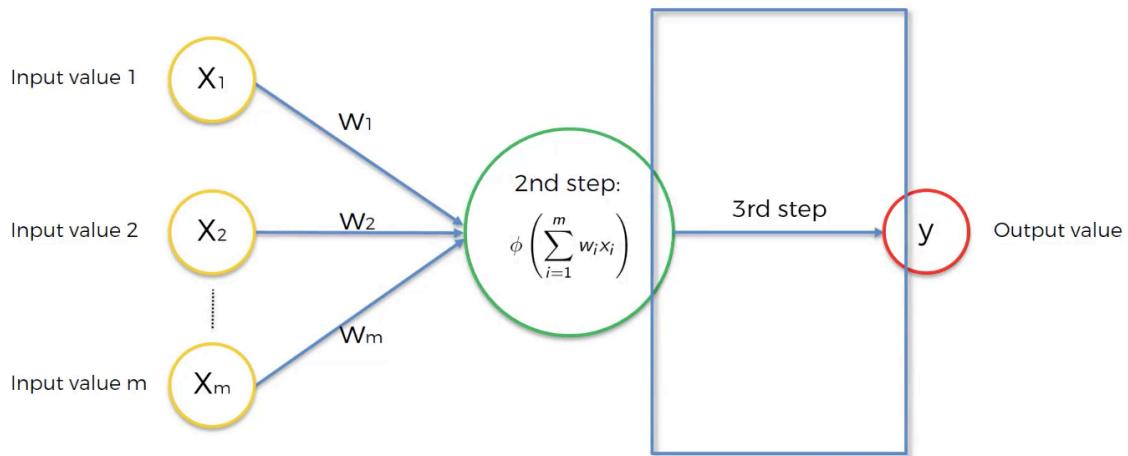


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Step 2 is activation function which will specify whether it should pass the signal or not

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