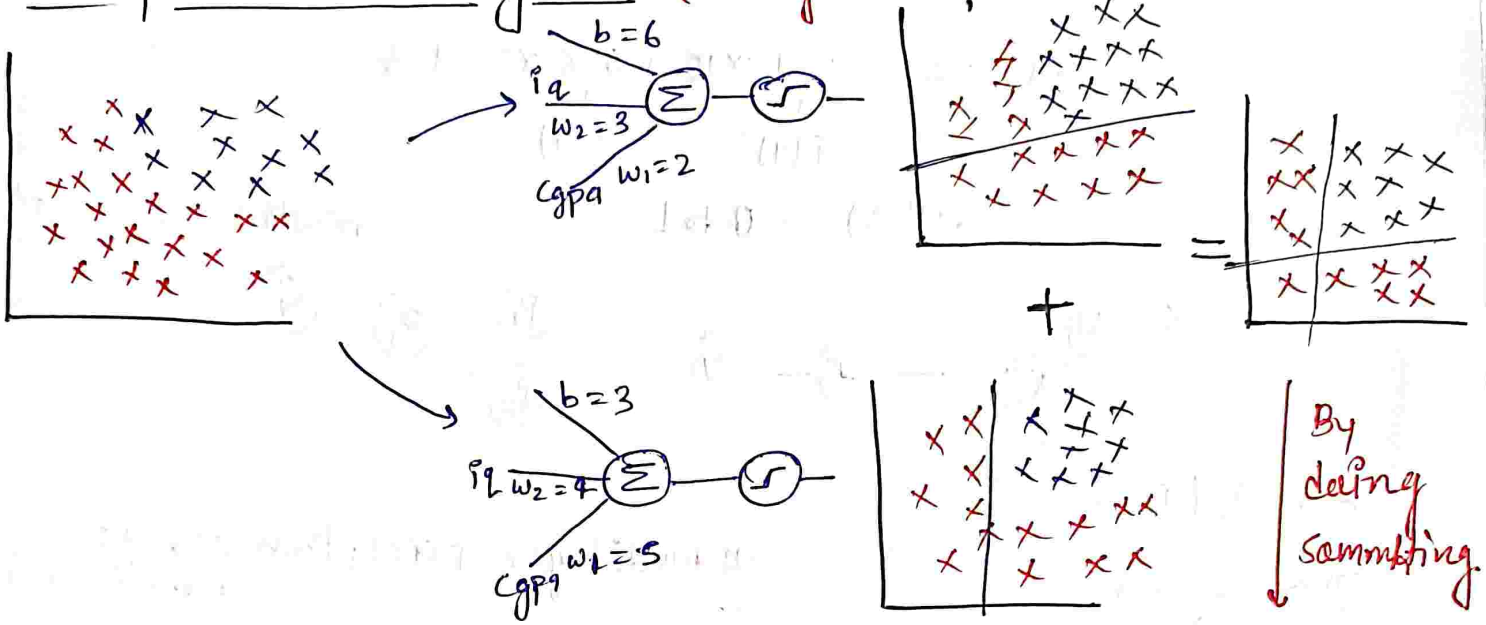
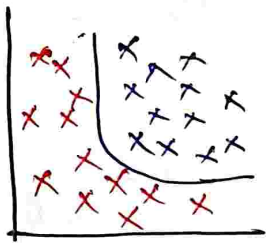
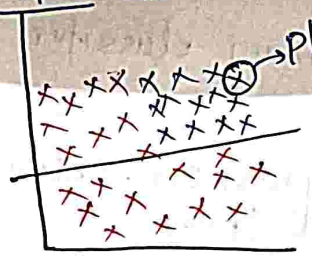
2. XOR ques

→ Perceptron with sigmoid (taking multi perceptron)

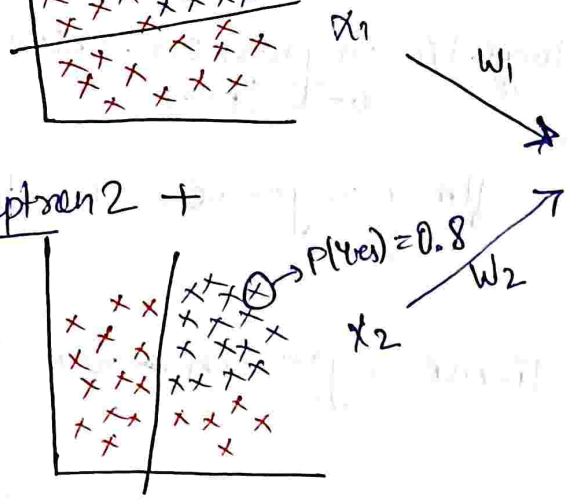




perceptron 1



combination of two ~~liner~~ linear perceptron.



perceptron 2 +

$0.7 + 0.8 = 1.5$

$\frac{1}{1+e^{-1.5}} = 0.82$

$\sigma(z) = \frac{1}{1+e^{-z}}$

We can use ~~wei~~ weight for the ~~d~~ indivals perceptron

We can also add bias.

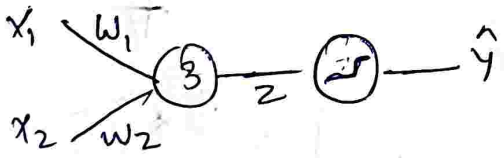
let weight of perceptron 1 = 10

" " " 2 = 5

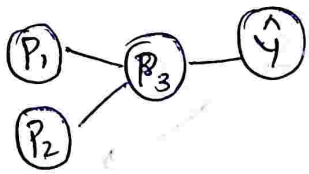
and bias = 3

then, $z = \underbrace{0.7}_{P(4)} \times 10 + \underbrace{0.8}_{P(4)} \times 5 + 3$

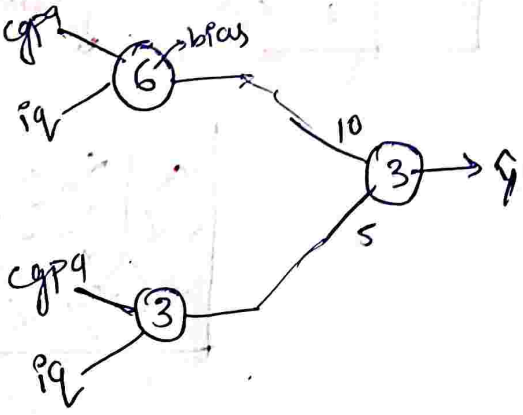
$\sigma(z) = 0$ to 1



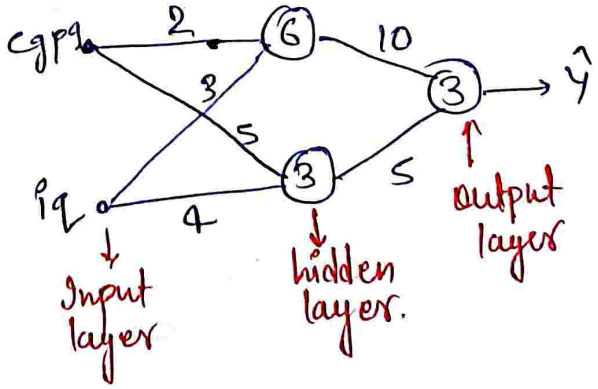
Multi layer perceptron



cgpa | iq | Place



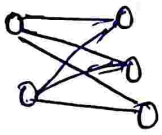
Multi layer perceptron capaciter non-linearities.



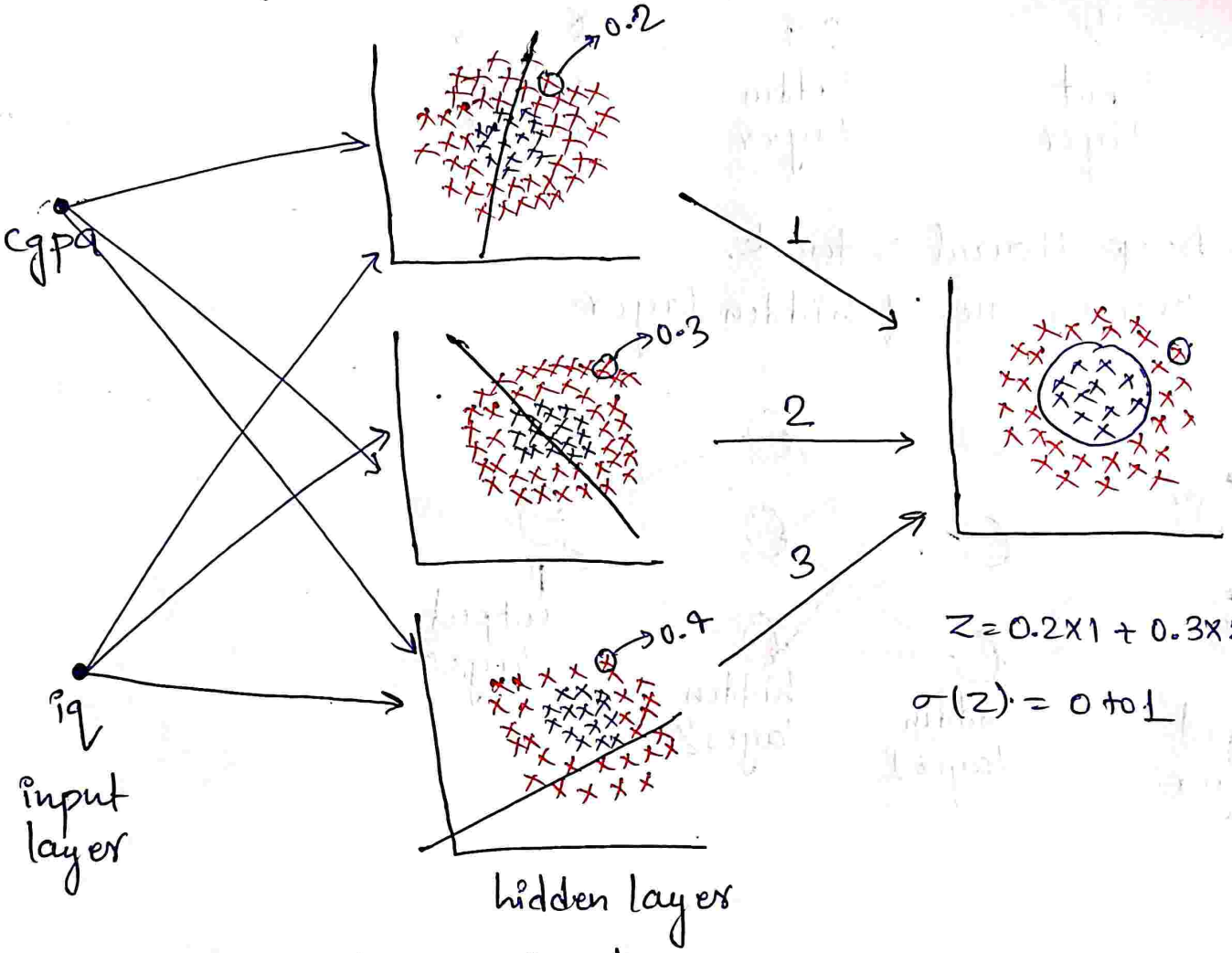
→ How to add changes in Artchit of nural network.

~~archither~~.

Architecture → How the nodes are connected



1. Adding nodes in hidden layer.



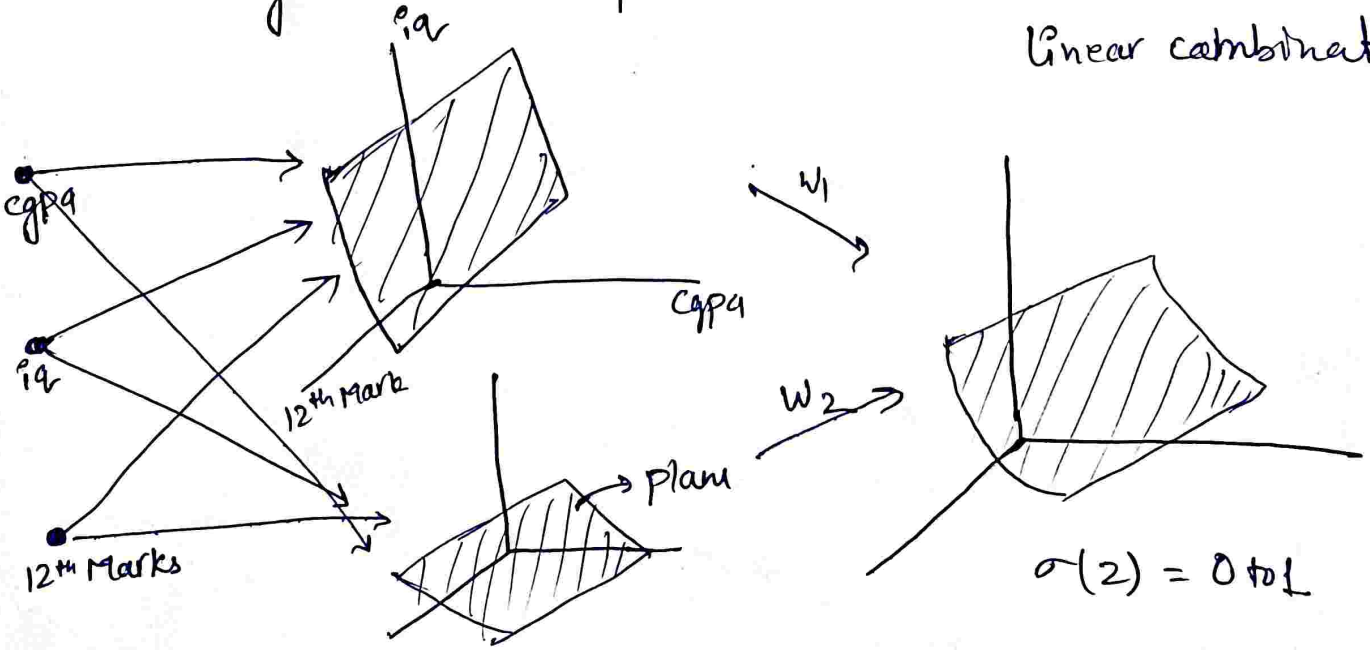
$Z = 0.2 \times 1 + 0.3 \times 2 + 0.9 \times 3$

$\sigma(z) = 0$ to 1

bi

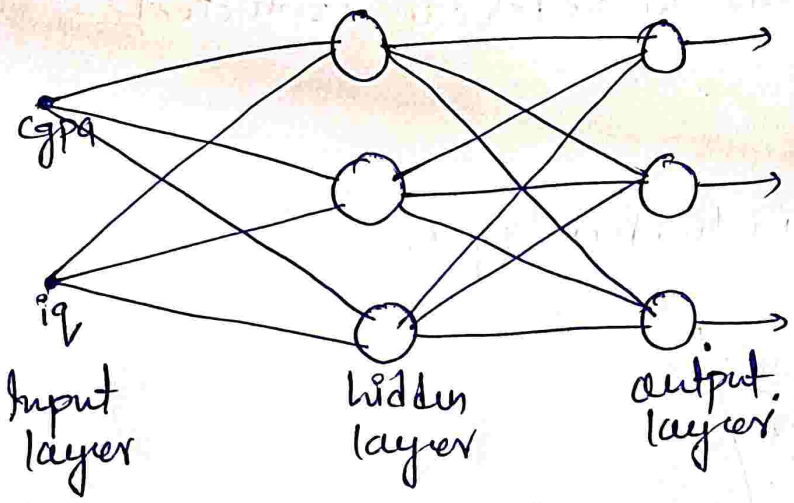
2. Adding nodes in input

Linear combination



$\sigma(z) = 0$ to 1

3. Adding nodes in output node



4. Deep Neural Network.
Increase no. of hidden layer