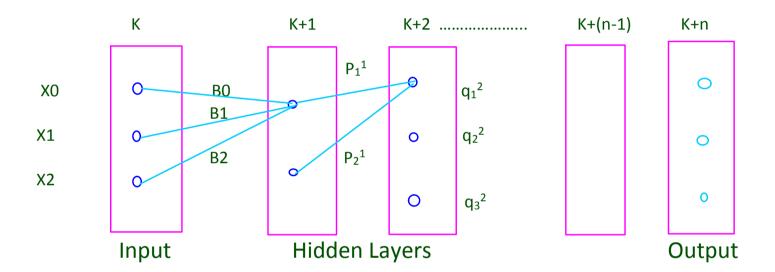
## **MULTI LAYER PERCEPTRON**

What happens when the classes are not linearly separable?

It contains Input, Hidden layers, Output. So it depends on the number of hidden layers we are using in it. So, the question is how many hidden layers we need use it.

It's a Trail and Error method, So try with 1 if not 2 or if not 3,... Whenever you get the minimum test error that error will be finalized.

So, In general 2 or 3 layers will be going to solve most of the problems.



P<sub>i</sub><sup>k</sup> = I<sup>th</sup> Node in K<sup>th</sup> Layer.

- ★ For each layer, you can apply different function as well.

  To start Neural Network, we need to initialize with some number randomly as weights.
- ★ To calculate each Node , I need to apply summation and apply function as well.