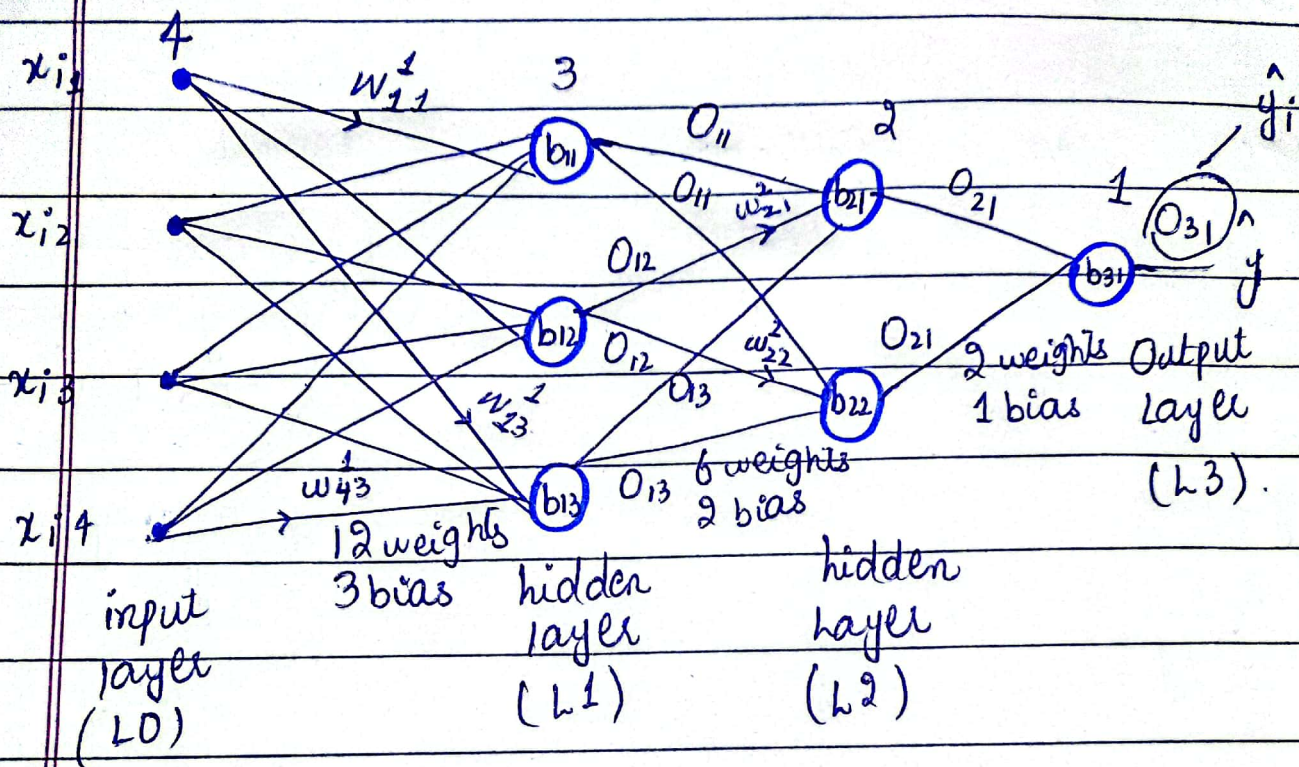


# Multilayer perceptron notation:



Data  $\rightarrow \{m \times n\}$

$m \rightarrow \# \text{ row}$

$n = 4$

	1	2	3	4	$\hat{y}$
$i$	.	.	.	.	

one by one row.



decide

Date: \_\_\_\_\_

trainable parameter = ?

└→ training → (Back propagation)

How much  
find the values of weight  
and bias = ?

There are 26 trainable parameters = Back propagation  
(find karain ga)

**Weights, bias, output notation :**

Bias →  $b_{ij}$  ∴  $i \rightarrow$  layer ;  $j \rightarrow$  node

Output →  $O_{ij}$  ∴  $i \rightarrow$  layer ;  $j \rightarrow$  node

Weight →  $w_{ij}^k$  ∴  $i \rightarrow$  # node (current layer)  
∴  $j \rightarrow$  Jis layer mei enter ho raha  
hai us ki kn si node

∴  $k \rightarrow$  weight (Kn si layer mei enter  
ho raha hai).