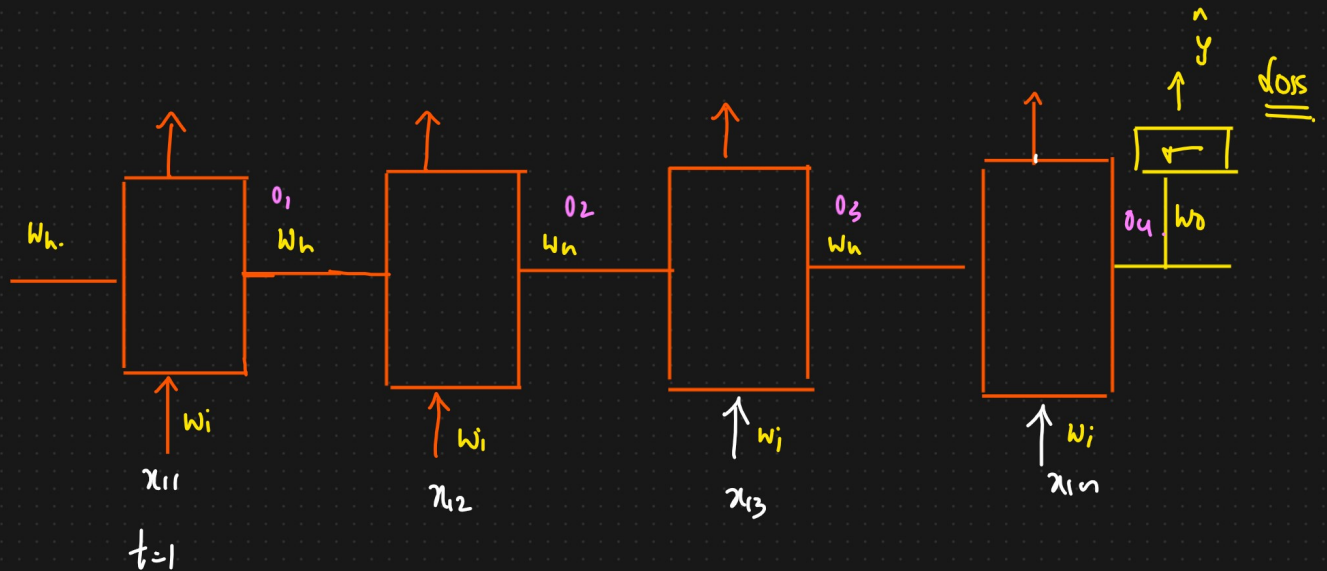


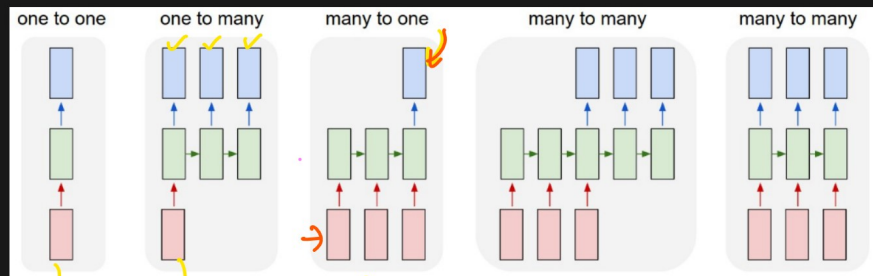
Bidirectional RNN

- ① Simple RNN \rightarrow practical Implement \rightarrow Embedding layers
- ② LSTM, GRU Variants RNN \rightarrow Practical Implement
- ③ Bidirectional RNN / LSTM RNN



Types of RNN

- ① One to Many RNN
- ② Many to One RNN
- ③ Many to Many RNN
- ④ One to One RNN



one i/p
one o/p

one i/p
o/p many

Image search
I/p many
o/p one.

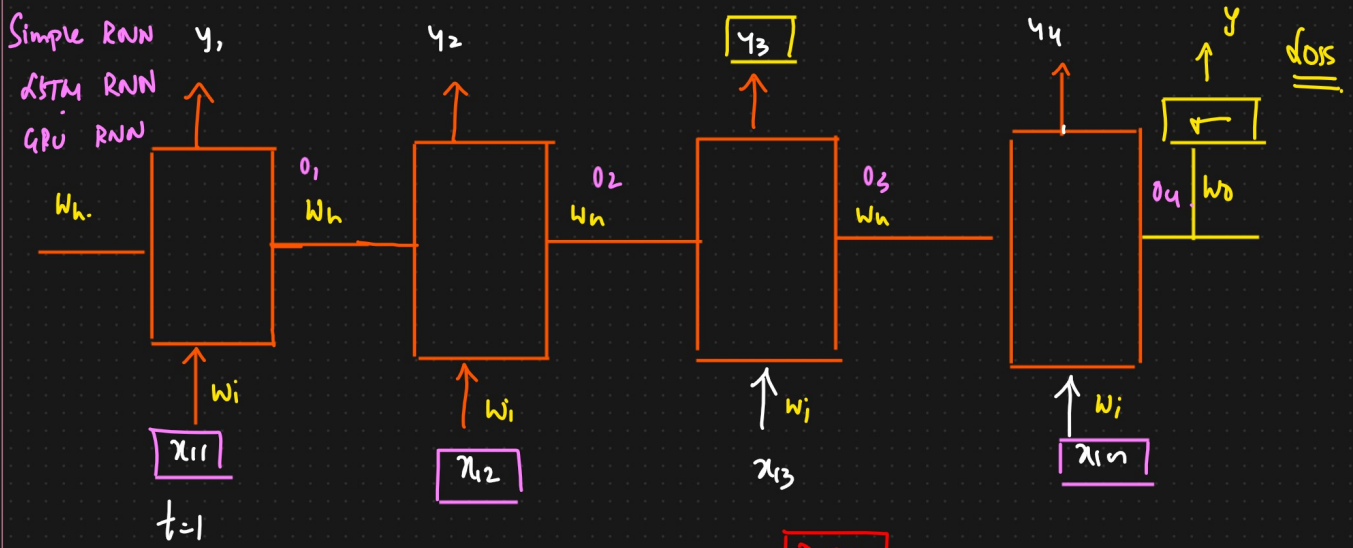
A cat eating
food
o eating

Language Translation
many I/p
many o/p.

Eg:

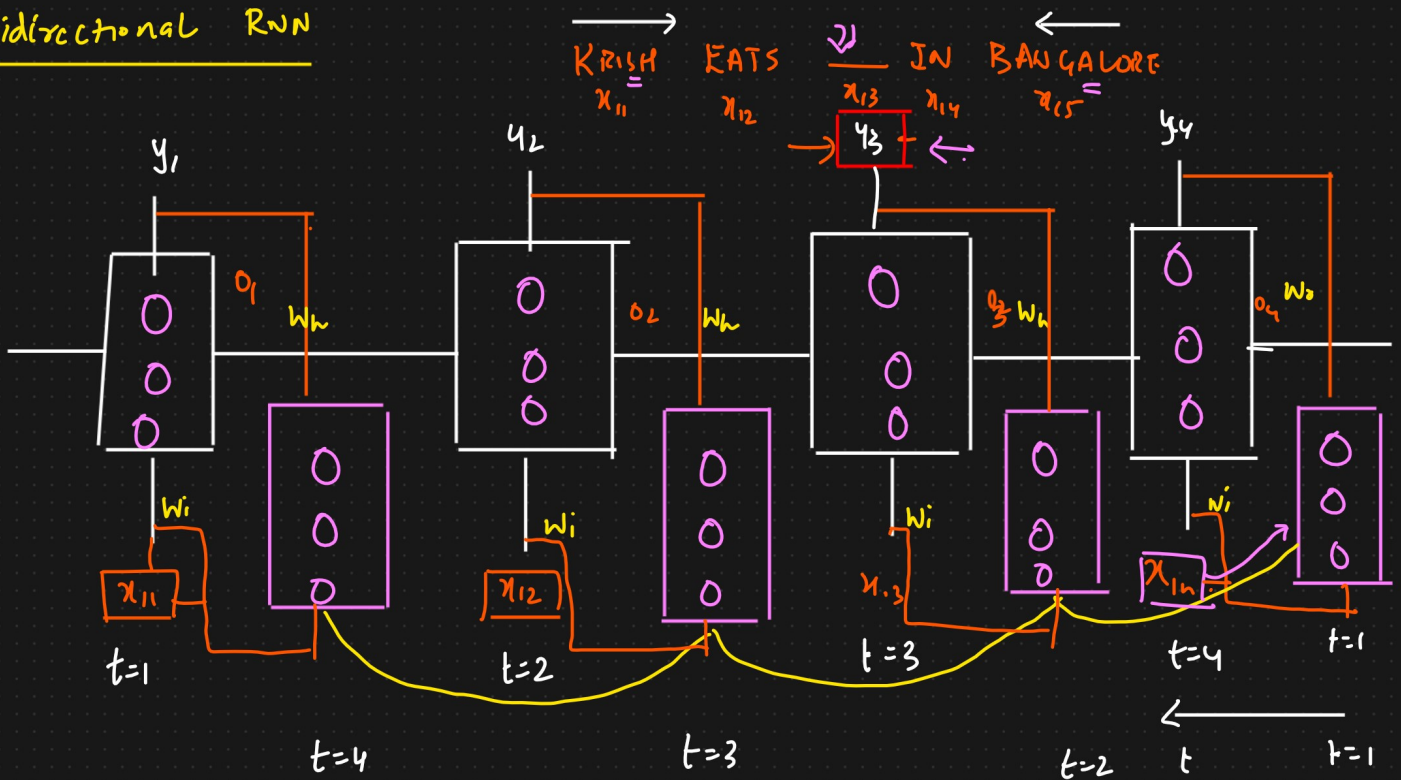
Eg: Image
Captioning

There is a dog and cat



Text Example = KRISH EATS IN BANGALORE
 KRISH EATS $\xrightarrow{\text{DSSA}}$ 14 PARIS
 PIZZA

Bidirectional RNN



① Forward propagation \rightarrow Equation \leftarrow