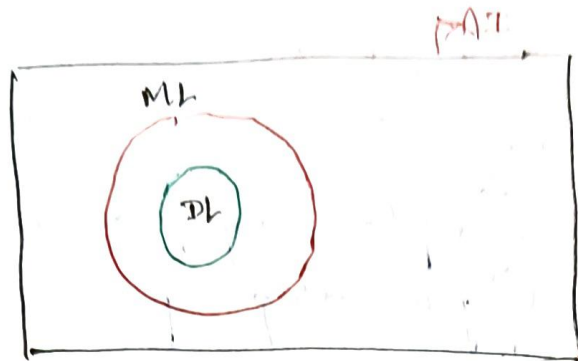# Deep Learning

- Can we make machine learn, similarly like how we human being learns?

→ Yes, Scientist found a technique called deep learning which mimics the human brain with the help of multilayer neural network.

Three Neural Network in Deep Learning:

① ANN → Artificial Neural Network → classification
                                    → Regression
  - Image classification also can be solved
  - used with tabular network.

② CNN → Convolutional Neural Network
  - I/P will be Images, videos frames
  Eg: RCNN, masked RCNN, Detection, Yolo, Vh16

  - Object detection
  - Computer Vision

③ RNN → Recurrent Neural Network
  - I/P will be in the form of time series or text data
  Eg: LSTM RNN, RNN HRU, Bidirectional LSTM RNN, Encoder Decoder, Transformers, BERT, Attention Model