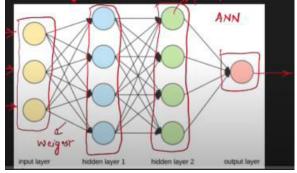
## Deep learning defintion:

Deep Learning is a subfield of Artificial Intelligence and Machine Learning that is inspired by the structure of a human brain.

Deep learning algorithms attempt to draw similar conclusions as humans would by continually analyzing data with a given logical structure called Neural Network.

- ->Deep learning learns from unlabelled data unlike ML
- ->It follows the human like neural network architecture



Thier are multiple types of it including -ANN,RNN,CNN etc

- 1. Data Dependency
- 2. Hardware Dependency
- 3. Training Time
- 4. Feature Selection
- 5. Interpretability
- ->We need data in millions of magnitude to train models unlike ml
- ->We need gpu or(tpu)(tensor processing unit) with help of cuda which is invente by Nvidia
- ->Training time is much more
- ->Automatic Feature selection but reason remains anonymous (we cant interpret why it gave such an answer)unlike ml
- ->Every year internet is getting cheaper->more ppl to use->more data gathered->can perform ops on em
- ->hardware resourcing getting better each year
- ->frameworks like
- 1.TensorFLowby Google
- 2. Abstract version of tensorflow is Keras
- 3.PyTorch by Facebook