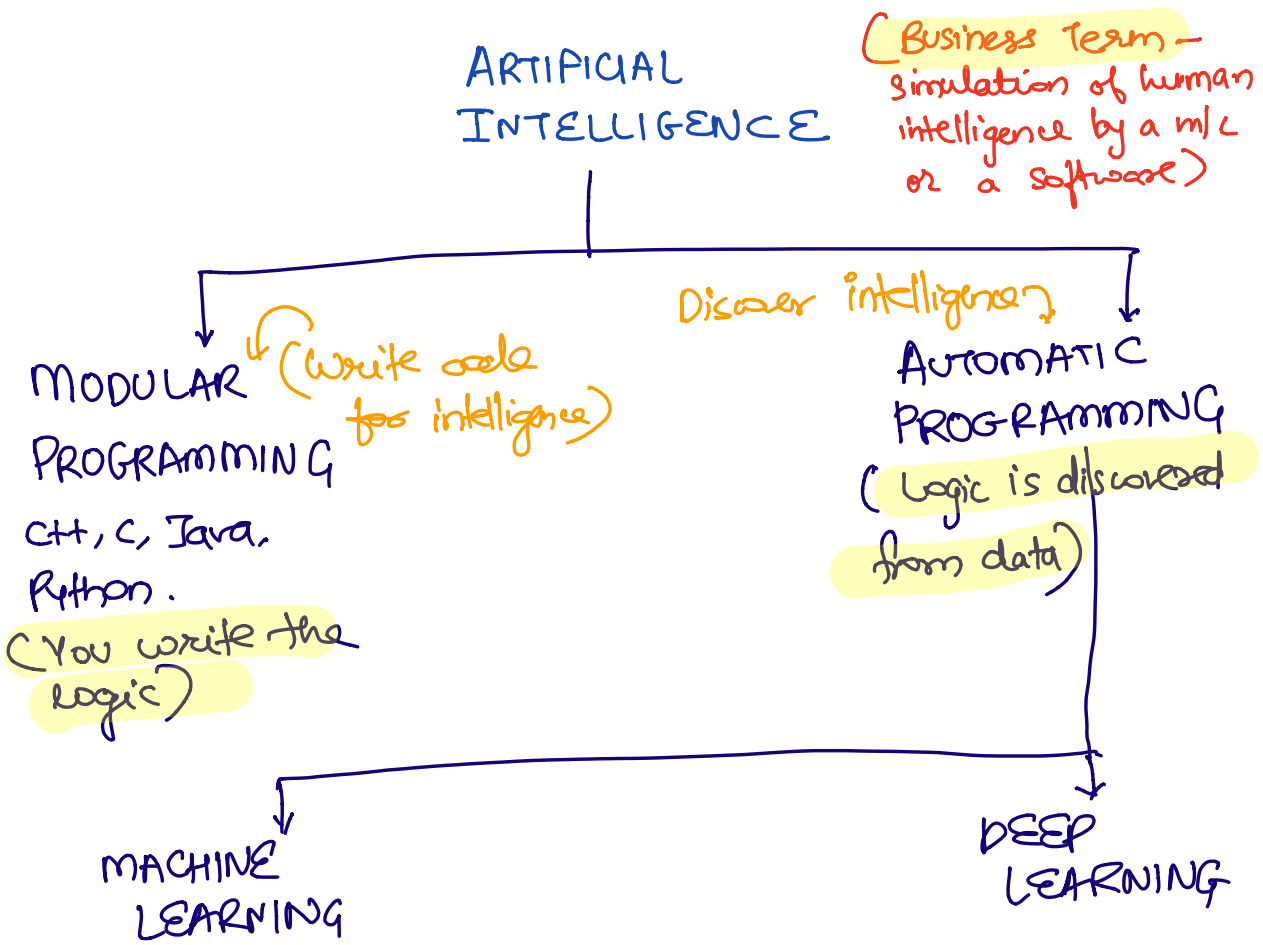
ARTIFICIAL INTELLIGENCE ?

MACHINE LEARNING ?

DEEP LEARNING ?

Data Mining ?

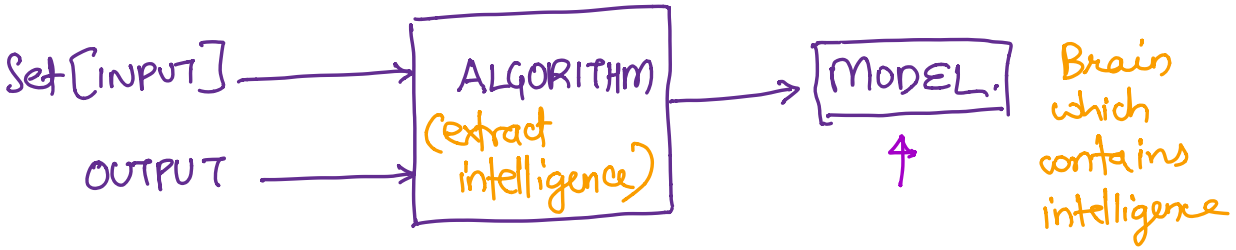
} Same!

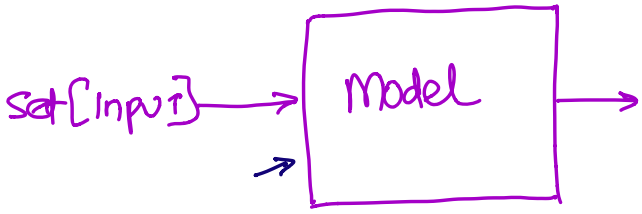


Machine Learning :- Implementation technique to extract intelligence out of the data using

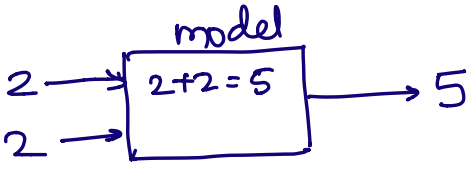
- Linear Regression
- K-NN
- Market Basket

DATA MINING ALGORITHMS & STATISTICAL FORMULAE.





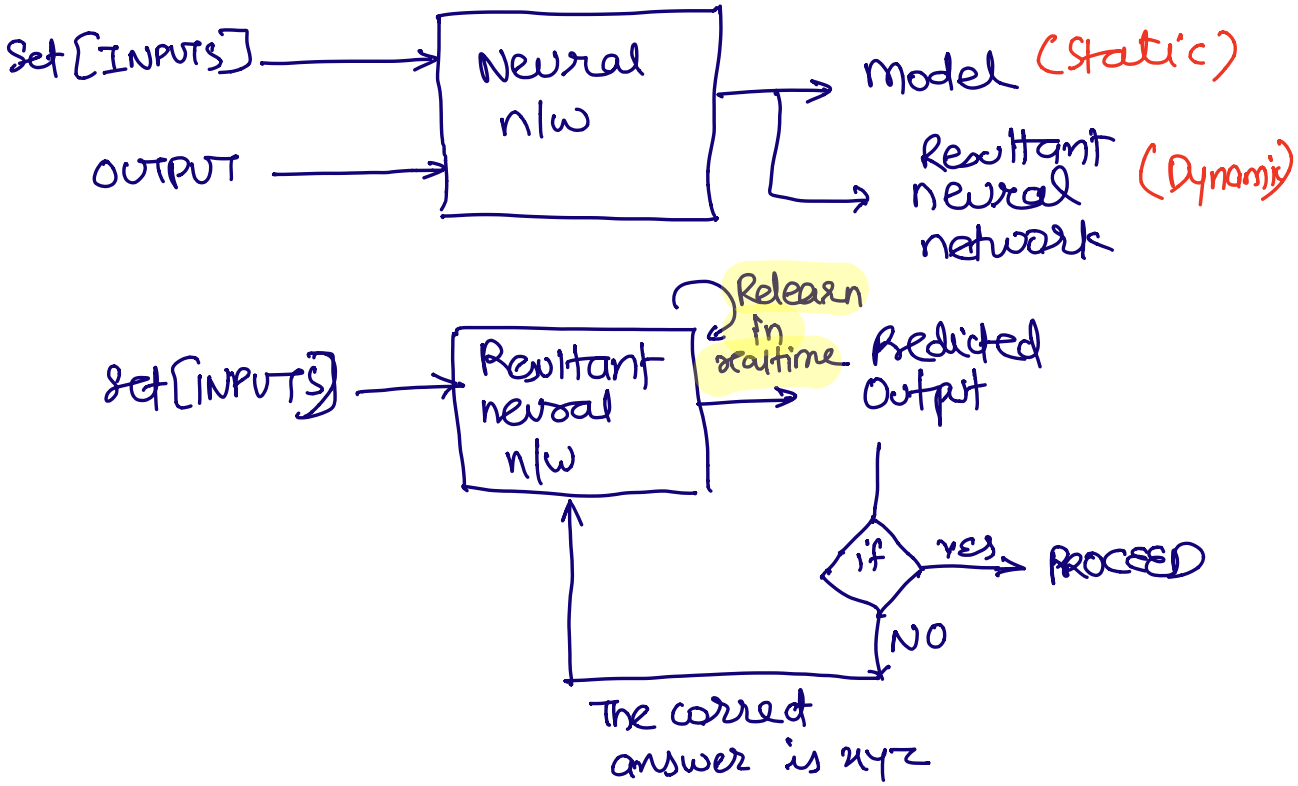
YOUR MODEL IS A STATIC MODEL. → once the model create it cannot change the thinking.

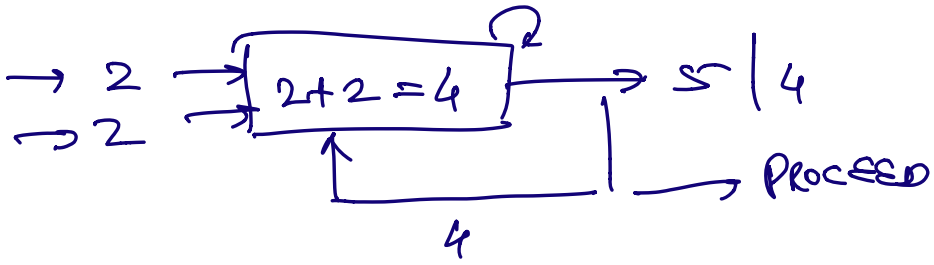


but the user has no medium to explain model whether the ans is correct or wrong.

DEEP LEARNING : Implementation technique to extract intelligence out of the data using

NEURAL NETWORK





Data Mining	Machine Learning

Similarity,

Both use the same algorithm to extract intelligence out of the data.

Difference,

① Applicable only for STRUCTURED DATA	① applicable for all kinds of data ① Structured data ② Semi-structured data ③ un-structured data
② Not compatible with distributed systems. Doesn't support Bigdata	② Compatible with distributed systems. Supports Bigdata.

Machine Learning:

R (free opensource)	Python (free opensource)	SAS
① R has less support to Bigdata. (development phase)	Python has many rich libraries that support Bigdata env.	SAS offers everything required for ML in Bigdata env.
RHadoop, SparkR → Distributed processing	Pyspark, Python Hadoop using Streaming → Distributed processg.	Its costly! License fee
The above is not enterprise-ready.	It has enterprise-grade packages.	
② Best in scenario where data is placed in single machine		
FREE	FREE	PAID

Expectations :-

① Basic knowledge on Python
- ✓ Basics
- ✓ Collections (Lists, Dictionary, Tuple, Set)
- numpy basics (1D array, 2D array)
- pandas basics (Data wrangling & manipulation)
- (Basics on EDA)
  - ↳ visual EDA using graph.

② Coding in Jupyter Notebook.

Python Basics from Python Cheatsheet !

① Variables and Strings
② Lists
③ Tuples
④ Dictionary
⑤ Set
⑥ if statements
⑦ for loop
⑧ Functions