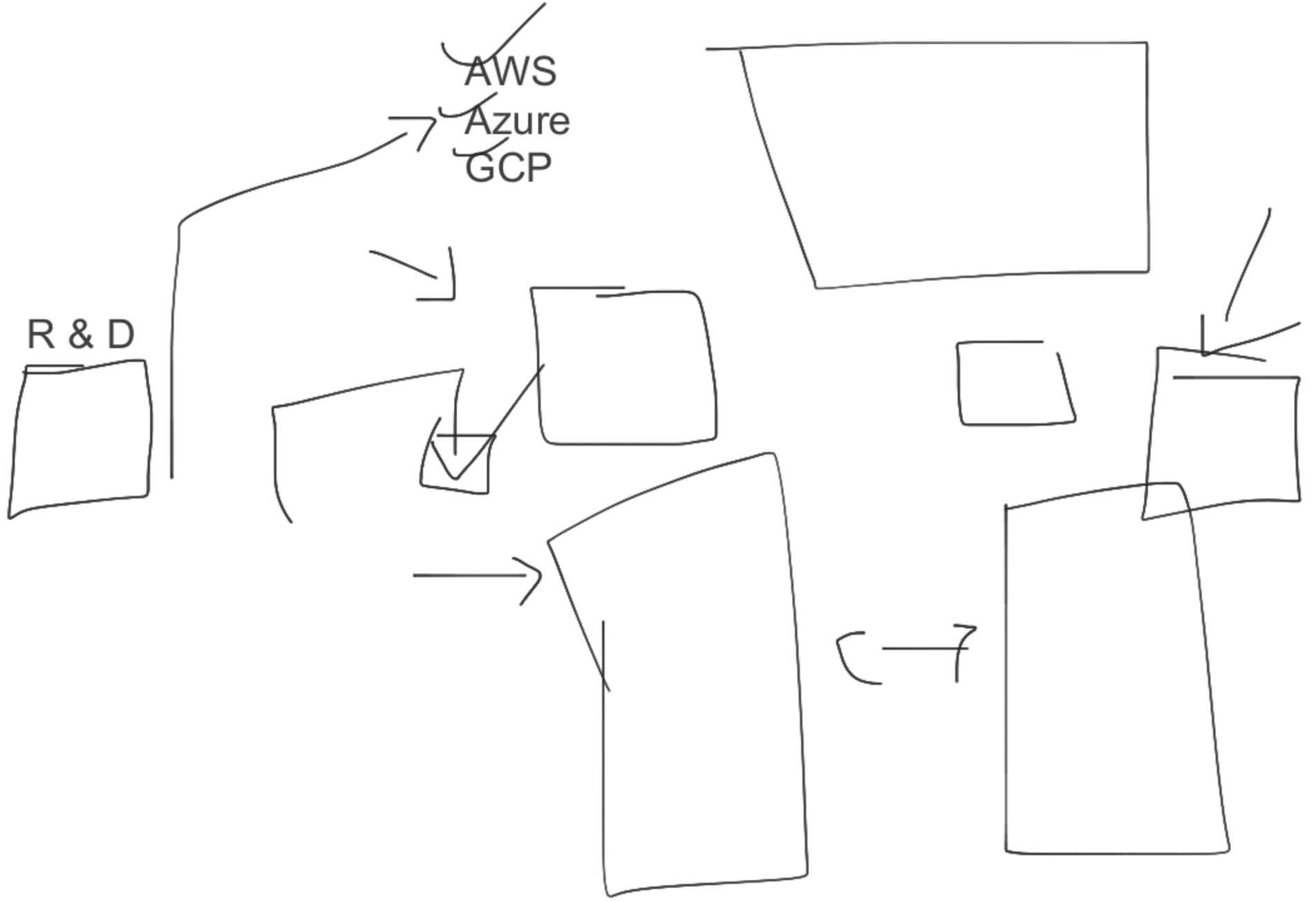
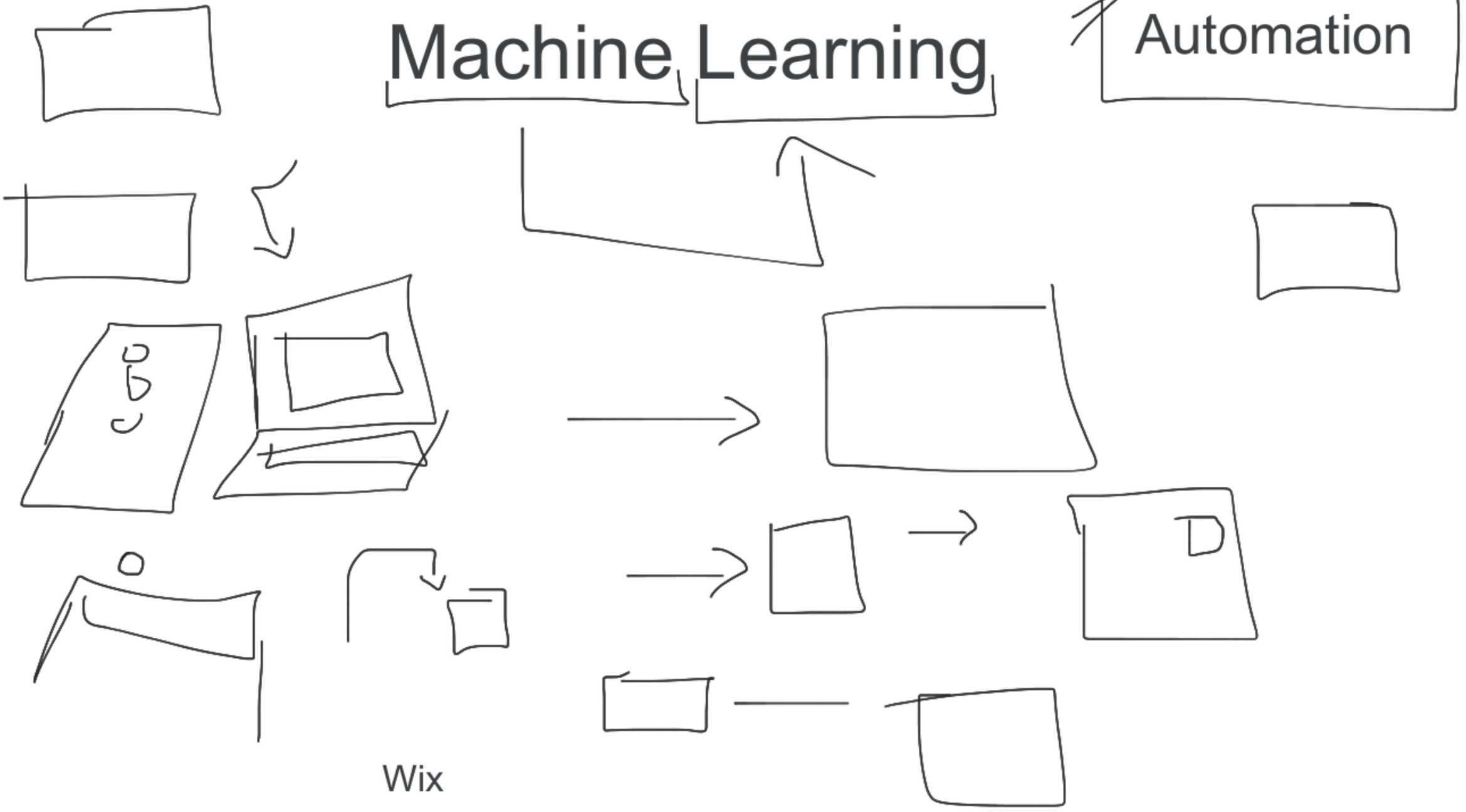
Python
Theory - 90%
Practical - 10%

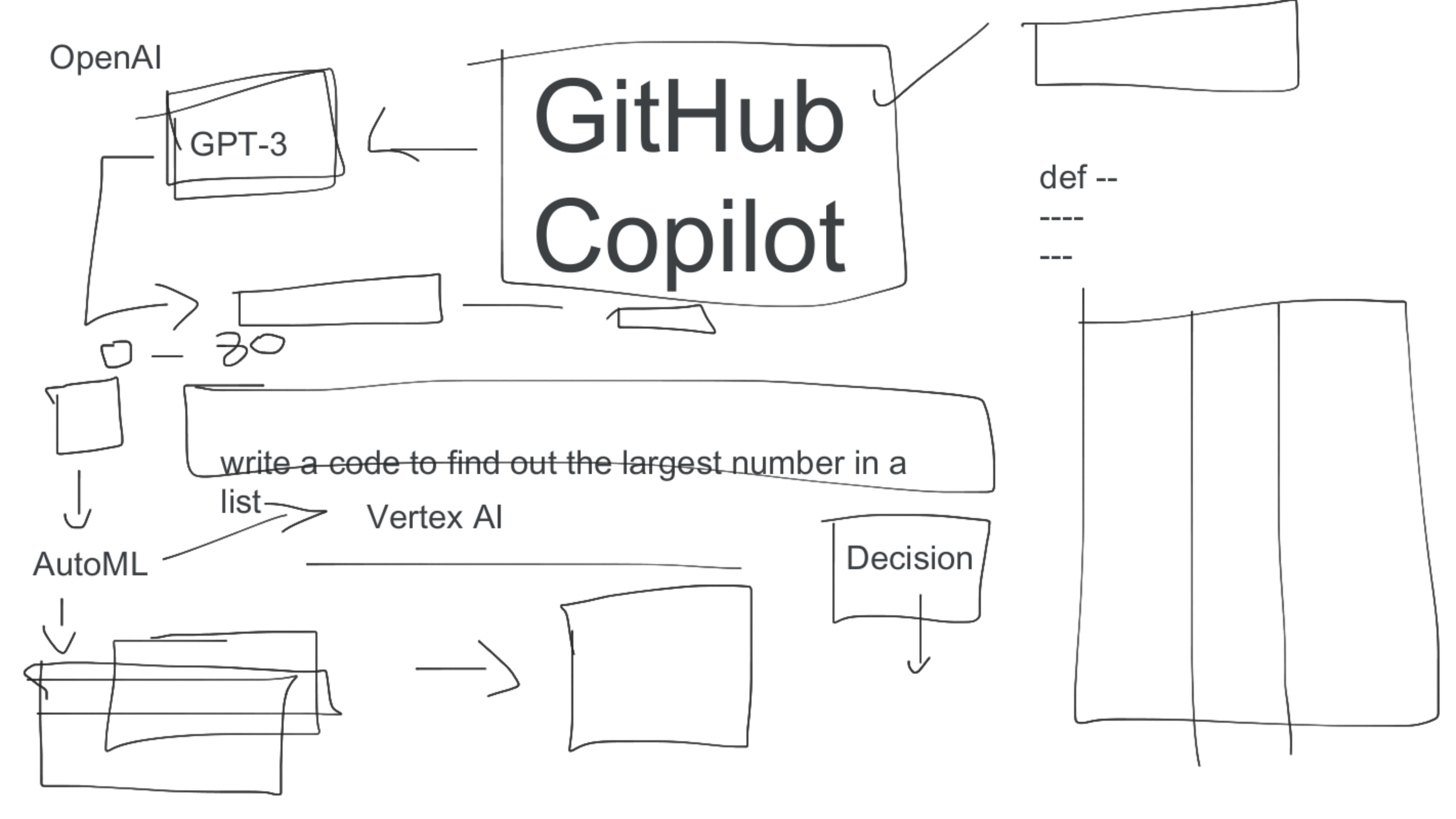
Apriori ->

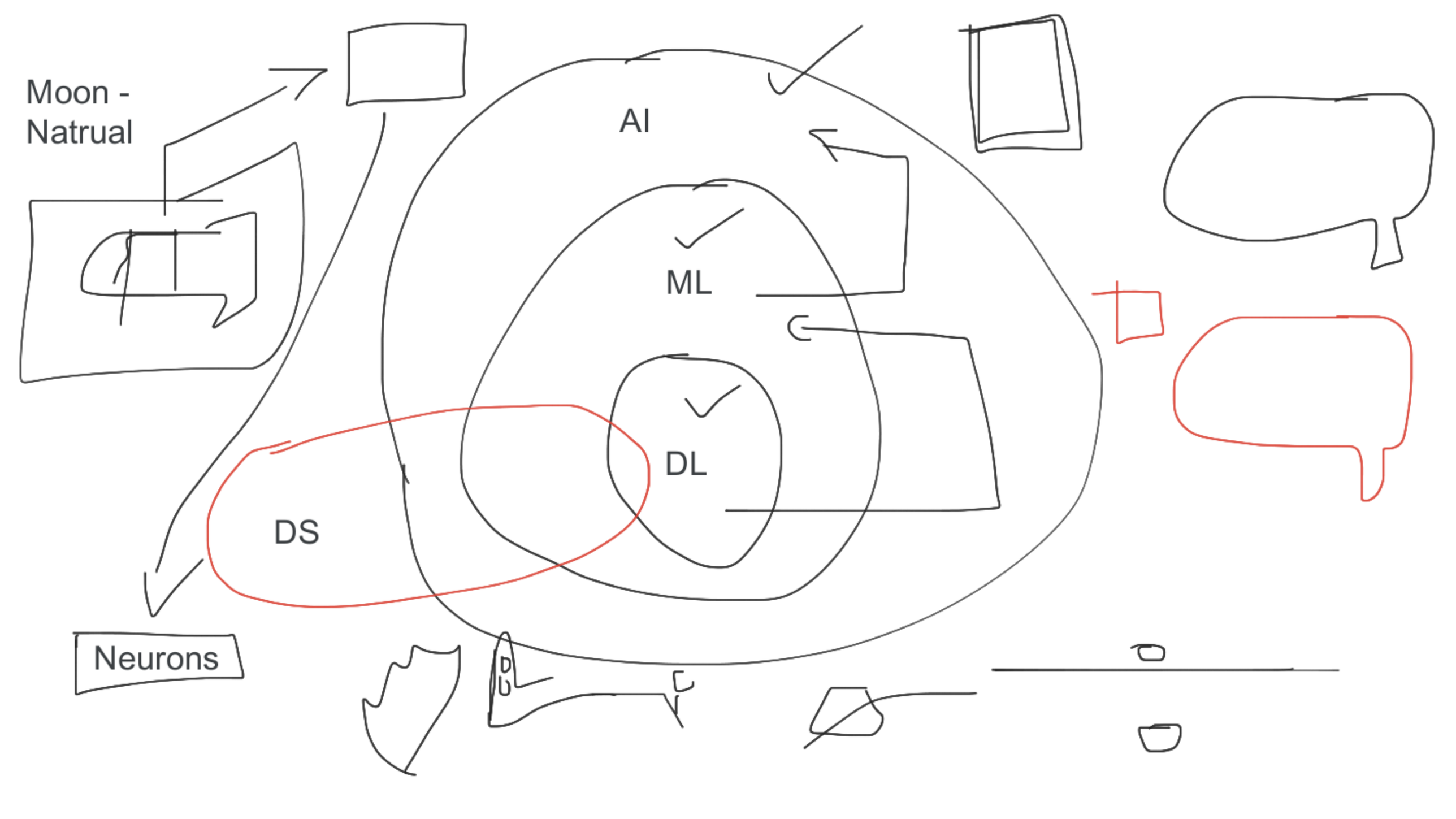


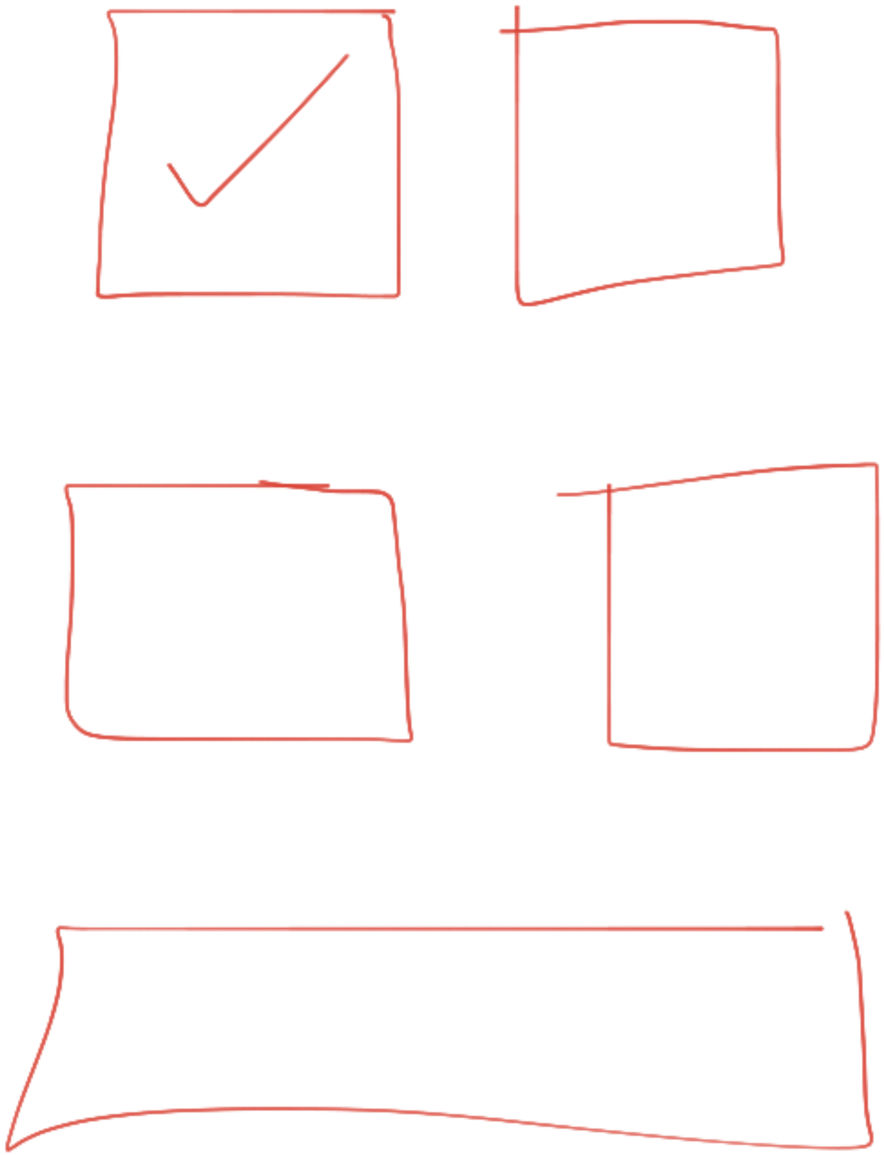
Machine Learning

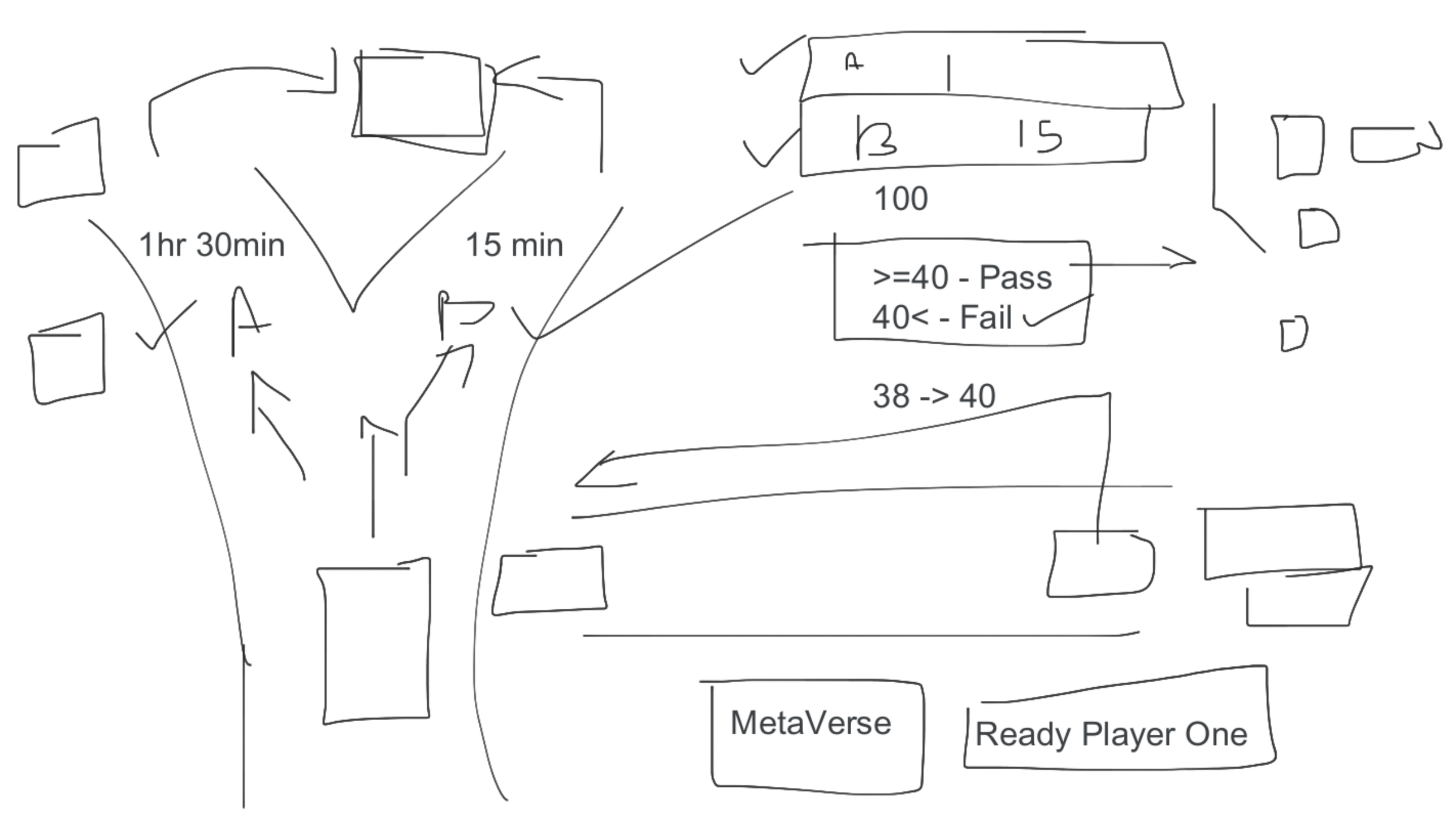


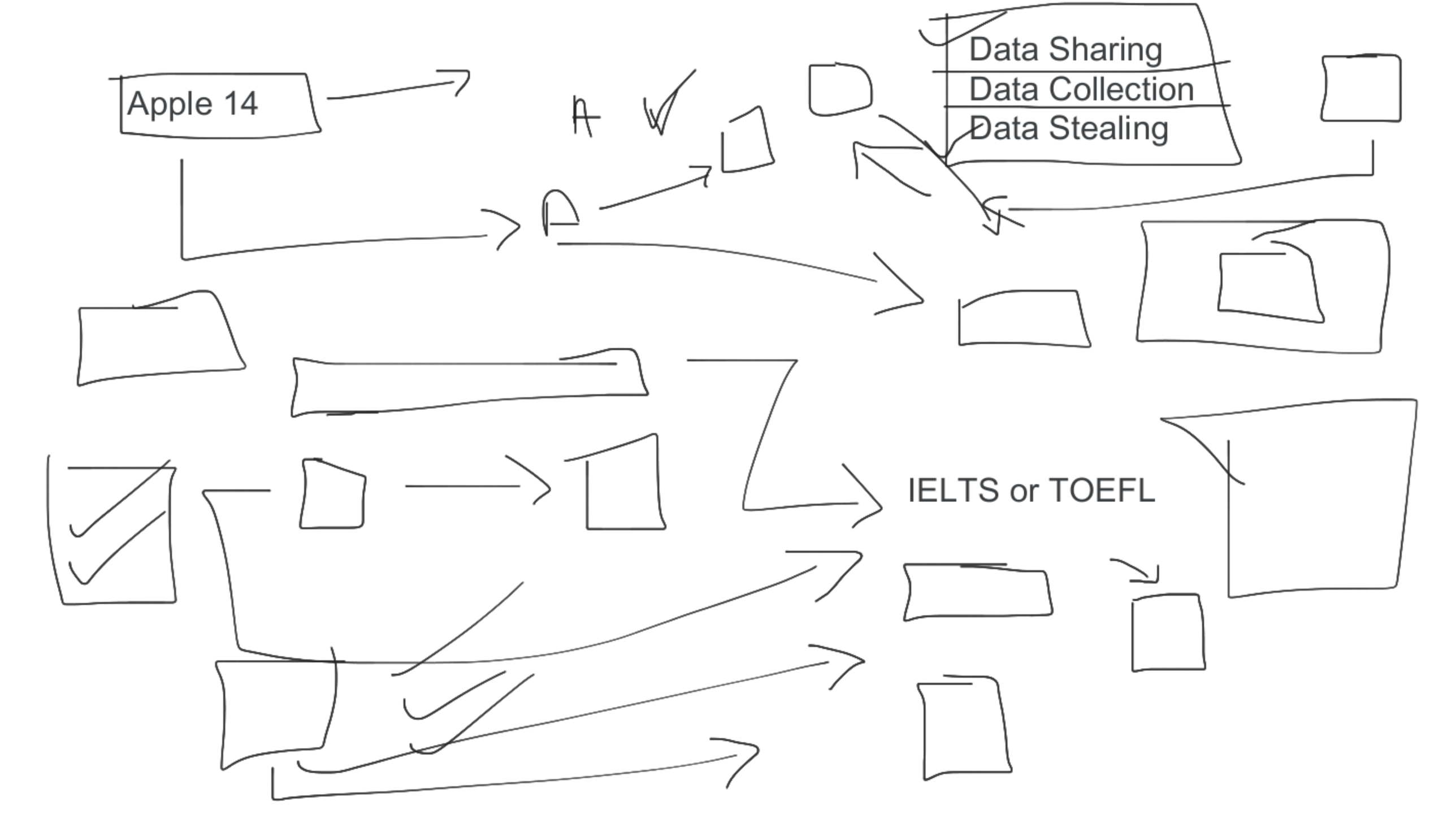
Wix

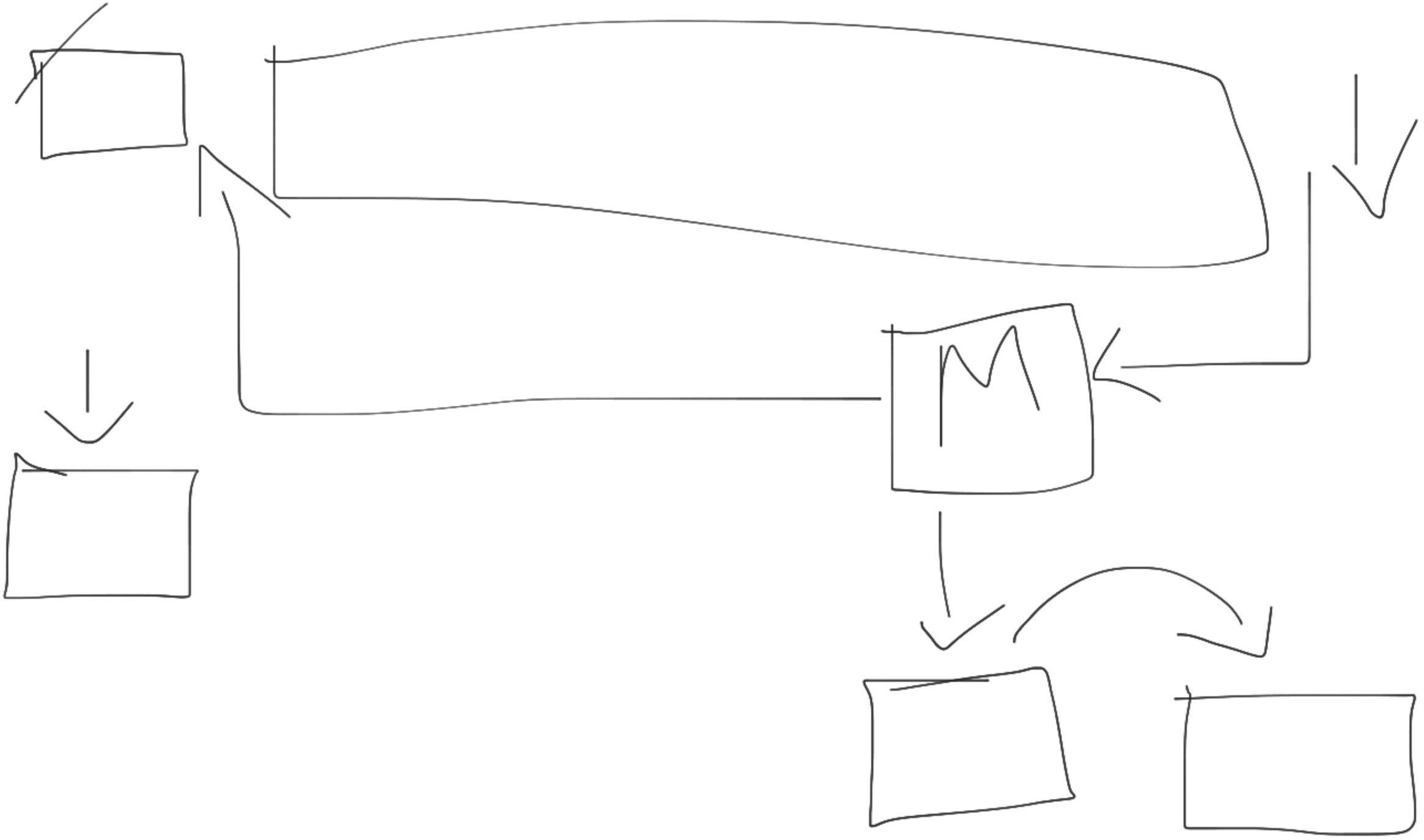

OpenAI
GPT-3
GitHub Copilot
def --
---
0 – 30
write a code to find out the largest number in a list
Vertex AI
AutoML
Decision


Moon -
Natrual
AI
ML
DL
DS
Neurons



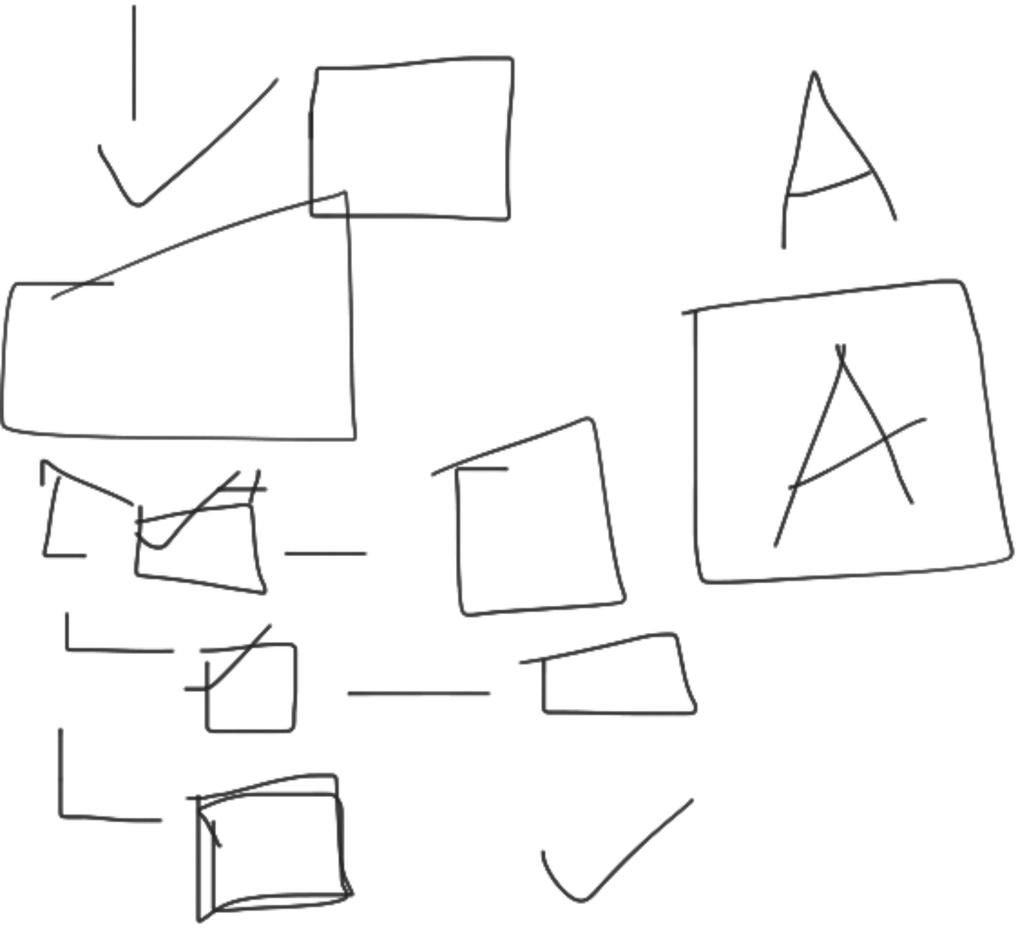

A
1
B
15
100
1hr 30min
15 min
>=40 - Pass
40< - Fail
38 -> 40
MetaVerse
Ready Player One

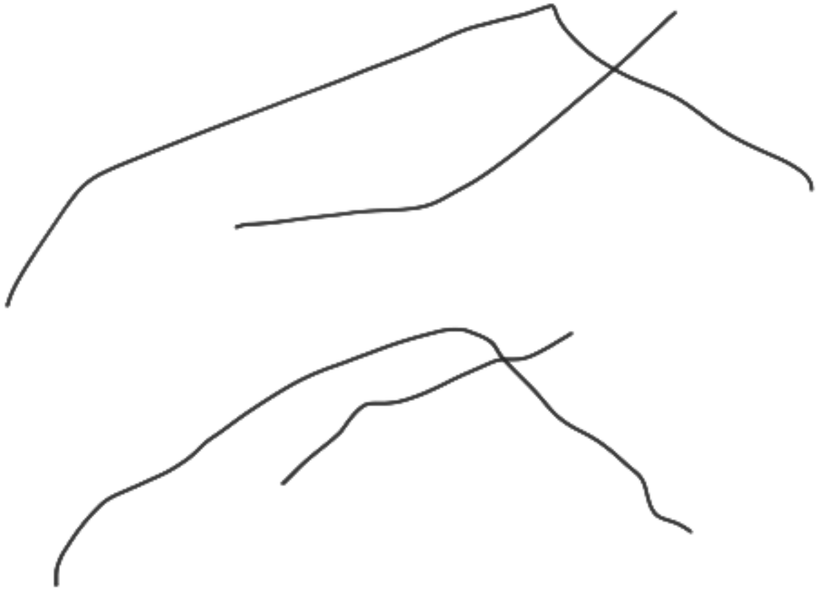

Apple 14
Data Sharing
Data Collection
Data Stealing
IELTS or TOEFL

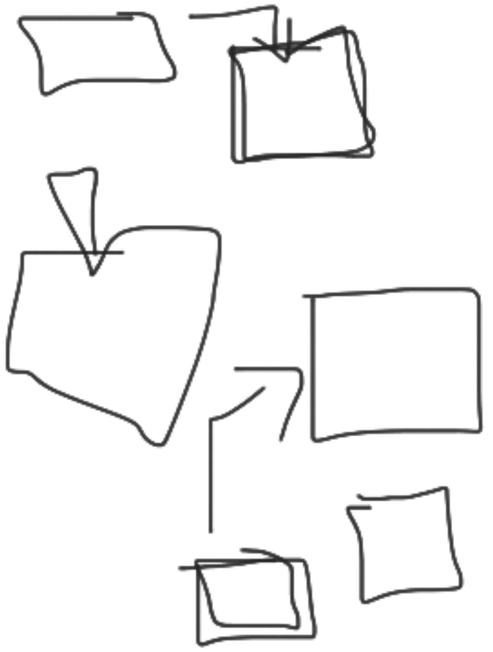


Machine - Anything that reduces human effort.

Machine Learning - A subfield of computer science that gives the computer, the abaility to learn without being explictily programmed.



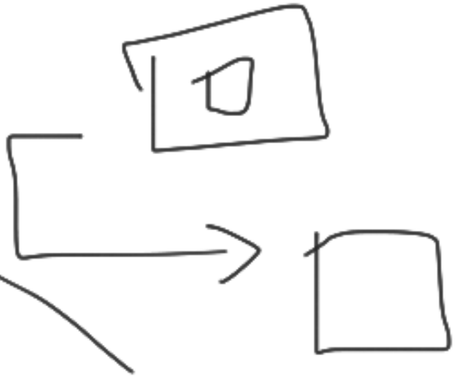




Label data

Types of Machine Learning

Supervision



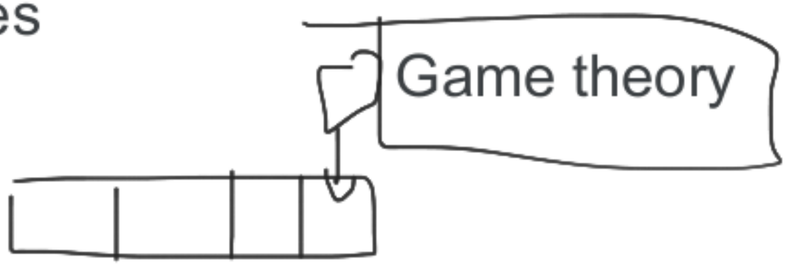
Supervised Learning

Unsupervised Learning

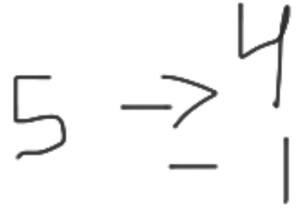
Reinforcement Learning

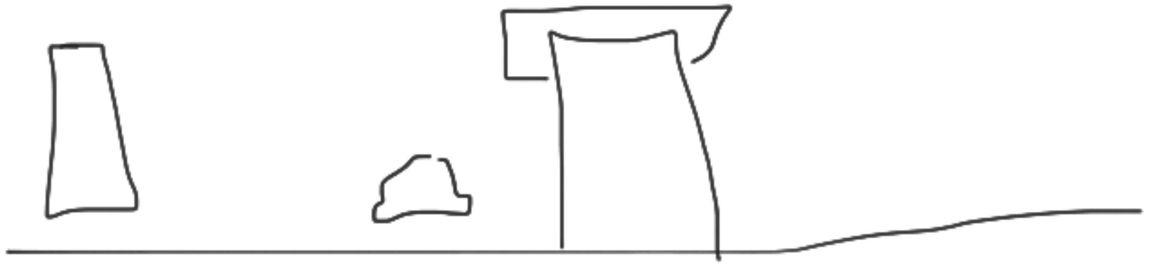
It is the first type of ML that uses the labelled data to train the algo.

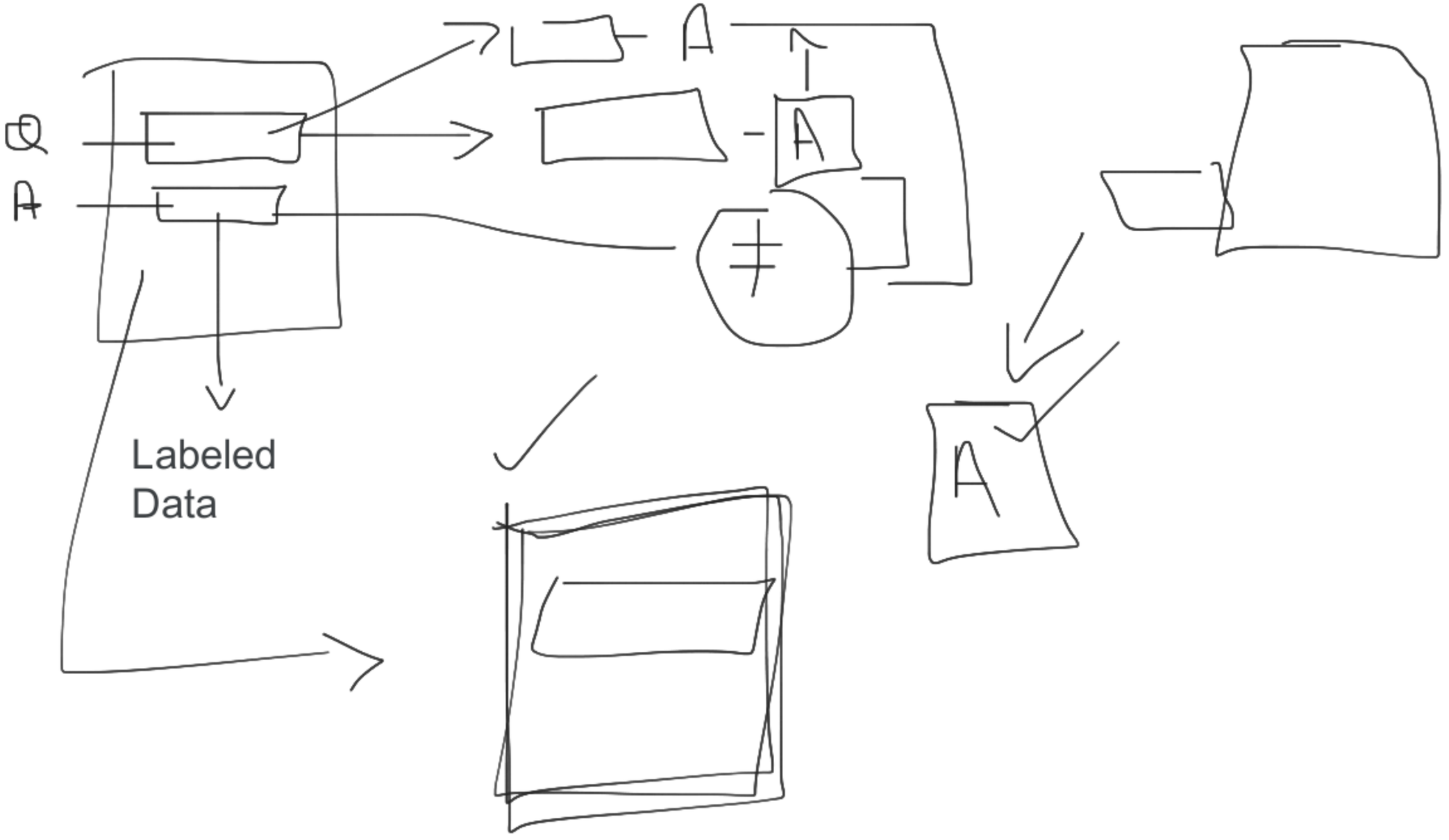
It is the type of ML that uses the unlabelled data to train the algo.



Alpha Go






Q
A
A
A
Labeled
Data
A

Lasso & Ridge LR
L1 & L2 Regularisation

Types of Supervised Learning

Java
Javascript

Car
Carpet

Regression

When the output is a Discrete or a continuous vale without having any categories.

Relationship b/w two or more variables where a change in one variable is associated with the change in other variable.

Eg.: How much salary will I get?

Predictive Modelling Technique

Input -> Independent Variables -> Features
Output -> Dependent Variables -> Target

1. Linear Regression - Simple, Multiple, Polynomial
2. SVR - Support Vector Regressor
3. Decision Tree Regressor
4. Random Forest Regressor

Classification

When the output is categorical.

Eg.: Loan Prediction

1. Logistics Regression -> Sigmoid Function
2. KNN
3. SVM - SVC
4. Decision Tree Classifier
5. Random Forest Classifier
6. Naive Bayes Classifier

Types of Unsupervised Learning

Clustering

1. K-Mean Clustering
2. Hierarchical Clustering

Association

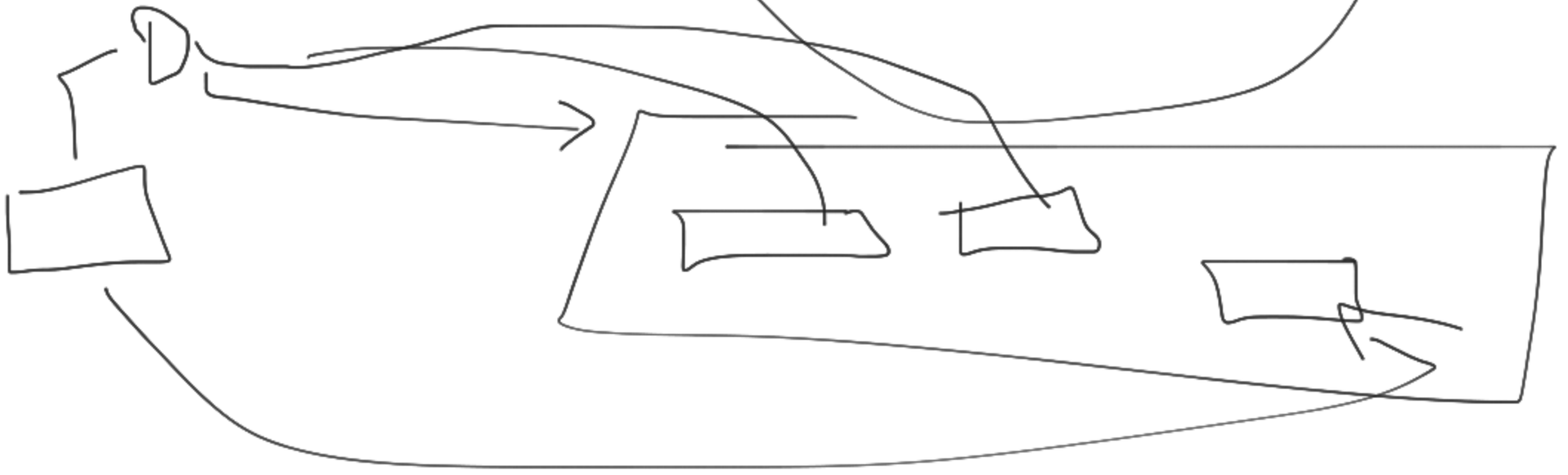
Application:
1. Market Basket Analysis
2. Recommedation System

1. Apriori
2. Eclat

Steps:

1. Data Preproccessing
2. Feature Engineering
3. Split the dataset -> Training & Testing
4. Choose an appropriate algorithm
5. Fit your model (train your model)
6. Make the model prediction
7. Evaluation (Accuracy)
8. Model Exportation

Hyper Parameter Tuning



Flask