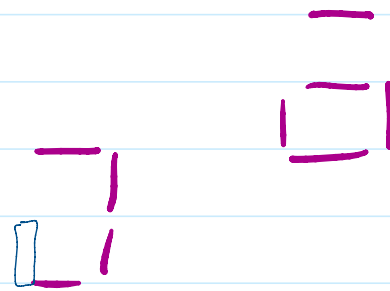
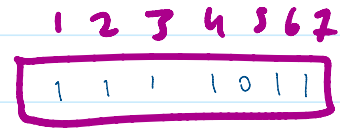
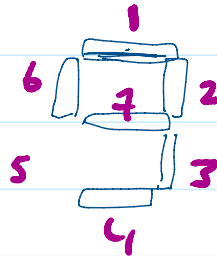


Quantum Machine learning

1] 7-segment display

Features x_0	x_1	class
1111011		9
1011101		6
1111000		3



2] ML Algorithms (Learning)

input: Set of features, Classes

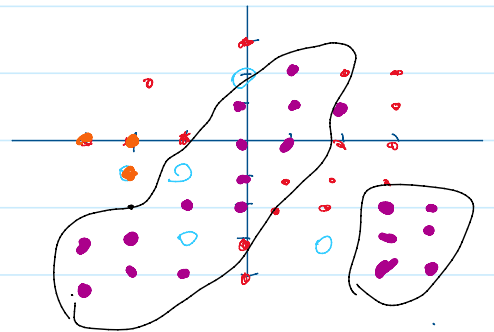
output: updated learning parameters

① k-Nearest Neighbour

Features = (x, y)

Class = { pur, orange }

x	y	class
(2, -1)		O
(0, 0)		P

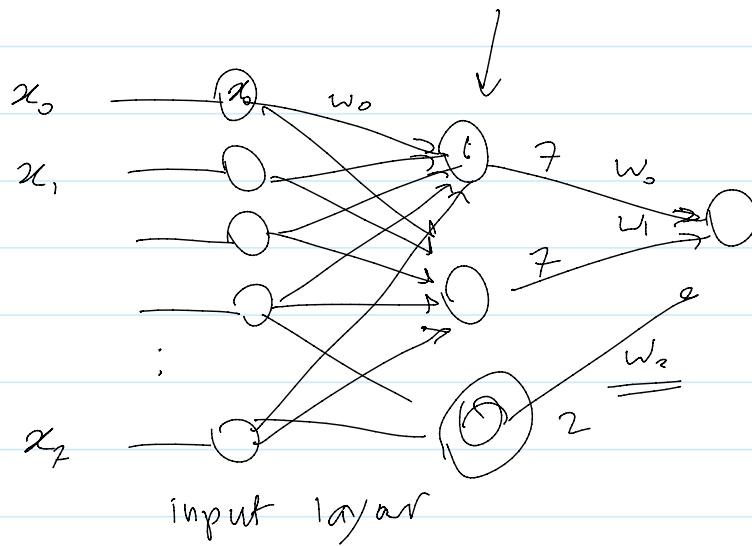


3 NN

② Neural Network

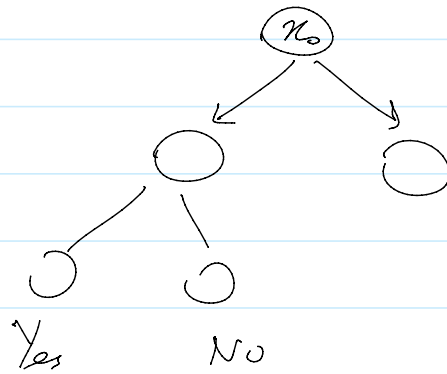
hidden

$$x_0 w_0 + x_1 w_1 \rightarrow t_1$$



$$x_0 w_0 + x_1 w_1 \dots \rightarrow t_1$$

③ Decision Tree



7
5
011011
1 1
1 1

3] Autoencoder

011011

