

Notes on KNN :

1) Explain about Supervised Machine Learning?



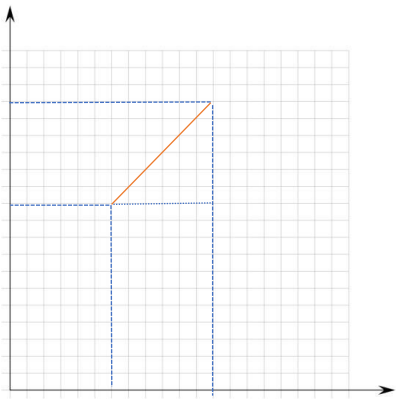
2) Explain about K-Nearest Neighbours?



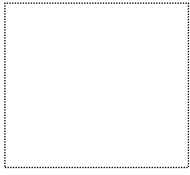
Notes on KNN :

3) Failure cases of KNN?

4) Define Distance measures: Euclidean(L2) , Manhattan(L1), Minkowski, Hamming?

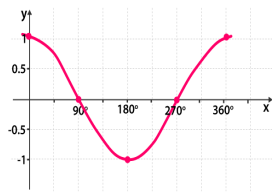
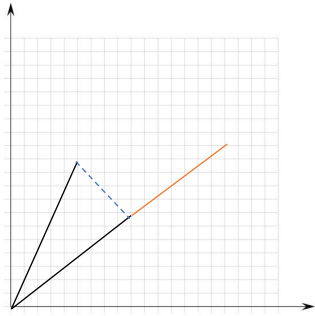


Notes on KNN :



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5) What is Cosine Distance & Cosine Similarity?



Notes on KNN :

6) How to measure the effectiveness of k-NN?



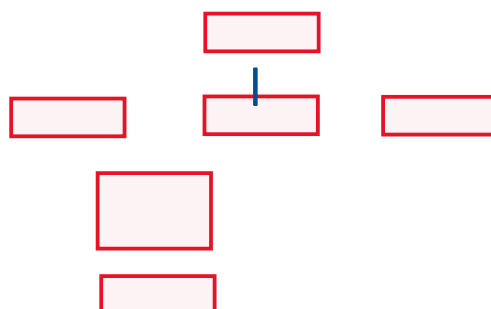
Notes on KNN :

7) Limitations of KNN?

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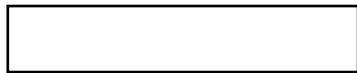
8) **How to handle Overfitting and Underfitting in KNN?**

9) **Need for Cross validation?**



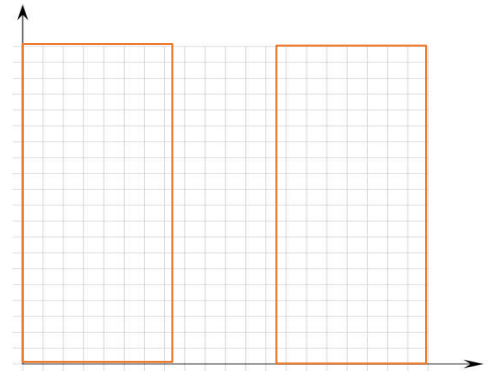
Notes on KNN :

10) What is K-fold cross validation?

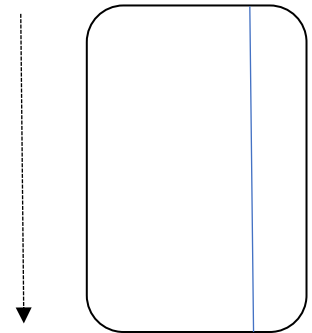


Fold	Train	CV	accuracy
K1	D1, D2, D3	D4	A4
K2	D1, D2, D4	D3	A3
K3	D1, D3, D4	D2	A2
K4	D2, D3, D4	D1	A1

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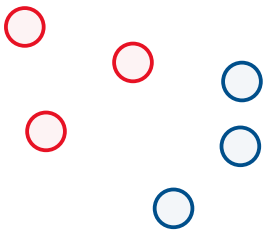
11) What is Time based splitting?



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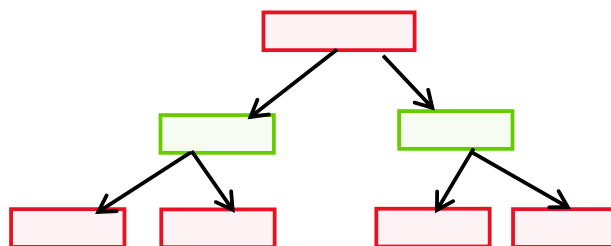
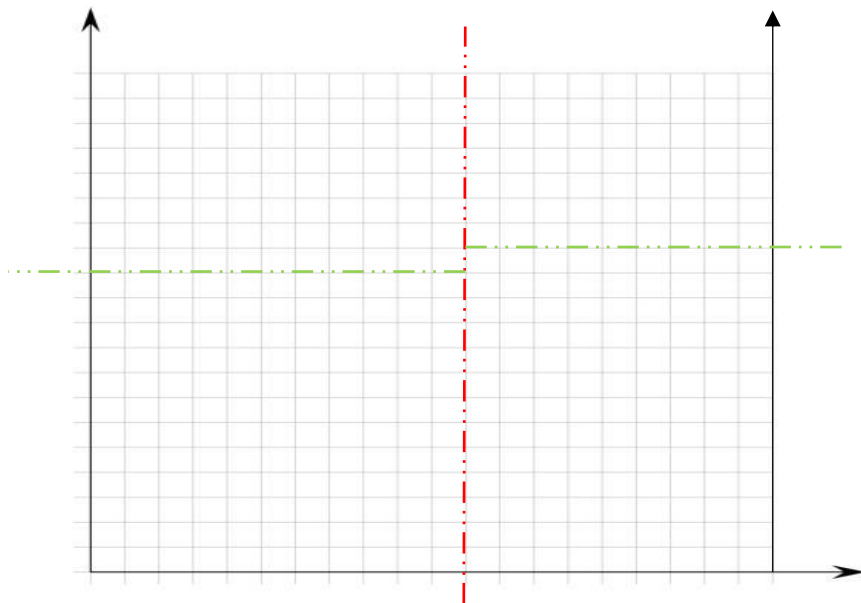
12) Explain k-NN for regression?

13) What is Weighted k-NN?



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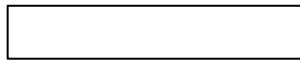
14) How to build a kd-tree?



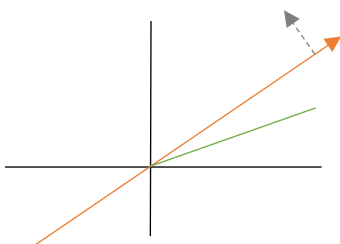
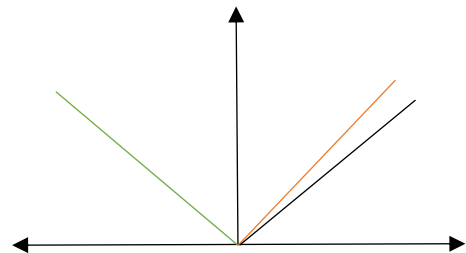
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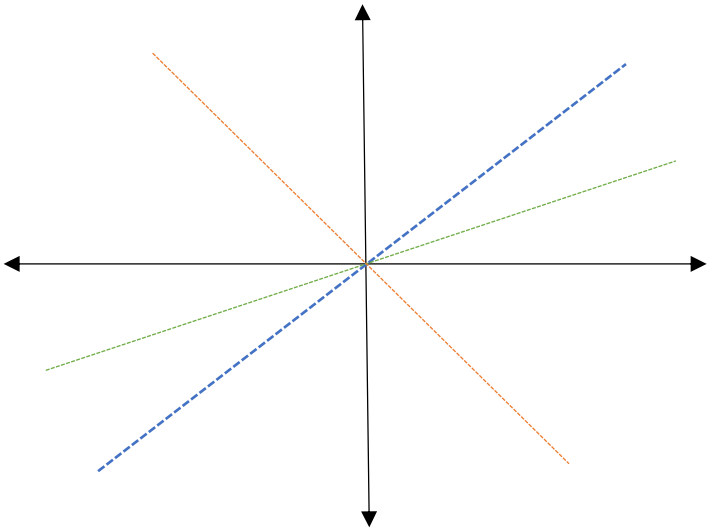
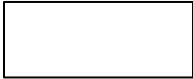
15) What is Locality sensitive Hashing (LSH)? (Hashing vs LSH?)



16) LSH for cosine similarity?

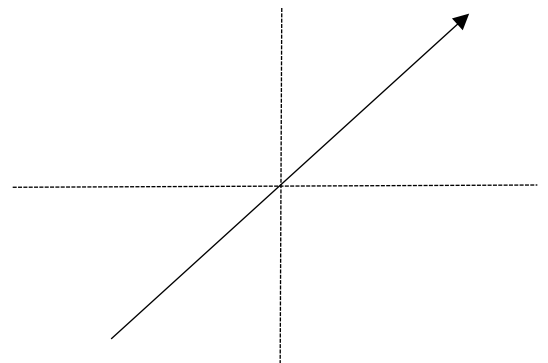


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17) LSH for Euclidean distance?



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