

- 1a. explain principal component analysis for unsupervised learning
- 1b. explain hierarchical clustering
- 2a. explain regression trees in detail
- 2b. explain bayesian additive regression trees
- 3a. explain dimensionality reduction methods in detail
- 3b. explain considerations in high dimensional data -- more no of attributes. then how to perform
- 4a. what is a hyperplane explain maximum margin classifier in detail
- 4b. explain support vector machines in detail
- 5a. explain decision tree classifier in detail
- 5b. explain disadvantages and advantages of tree based measures
- 6a. explain subset selection methods in detail
- 6b. explain shrinkage methods in detail--ridge/lasso regression
- 7a. what is bagging and explain random forests in detail
- 7b. List the challenges of unsupervised learning and what are the advantages and disadvantages of K means clustering

Open book problems///