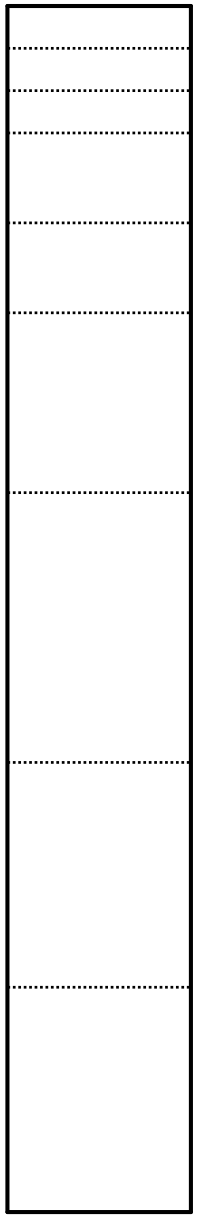
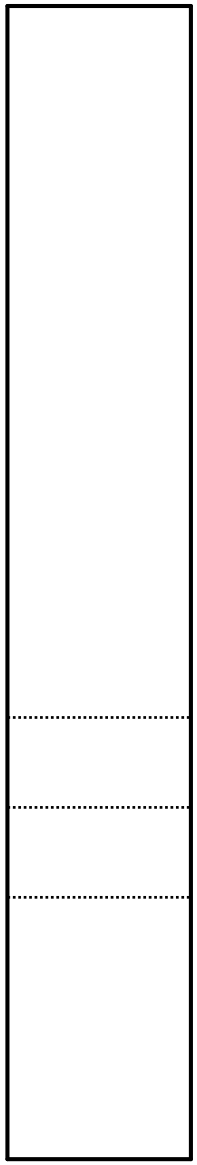
	Machine Learning Guidelines						
S.no.							
1	Basic definitions	Reference [2], Chapter 1, page 1-5					
2	Hypothesis space and inductive bias	Reference [2], Chapter 2, section 2.1 - 2.4					
3	Bayes optimal classifier and Bayes error, Naive Bayes classifier	Reference [2], Chapter 6, section 6.1, 6.2, 6.7, 6.9					
4	Curse of dimensionality, dimensionality reduction, feature scaling, feature selection methods	Reference[3] Page 33-35 Reference [1], Chapter 10,					
5	Linear regression with one variable, linear regression with multiple variables	Reference [1], Chapter 7, page 194-205					
6	Gradient Descent	https://medium.com/analytics-vidhya/linear-regression-with-gradient-descent-derivation-c10685ddf0f4					



7	logistic regression, over-fitting, regularization. performance evaluation metrics, validation methods	1. https://towardsdatascience.com/introduction-to-logistic-regression-66248243c148 2. https://medium.com/@shiny_jay/ml-regularization-79a081666fbc 3. https://medium.com/@qempsil0914/courseras-machine-learning-notes-week3-overfitting-and-regularization-partii-3e3f3f36a287					
8	Decision trees	Reference [2], Chapter 8, page 52 - 60, 63 - 66					
9	k-nearest neighbor classifier	Reference [2], Chapter 8, page 231-233					
10	perceptron, multilayer perceptron, neural networks, back-propagation algorithm	Reference [2], Chapter 4, page 81-99					



11	Support Vector Machine (SVM), Kernel functions	Reference [1], Chapter 7, section 7.3 Reference [3], Chapter 6, page 292					
12	Approaches for clustering, distance metrics, K-means clustering, expectation maximization, hierarchical clustering	Reference [3], Chapter 9, page 424-426 Reference [1], Chapter 8, section 8.1, 8.5					
13	performance evaluation metrics	https://www.kdnuggets.com/2020/05/model-evaluation-metrics-machine-learning.html					
14	validation methods	https://www.analyticsvidhya.com/blog/2021/05/4-ways-to-evaluate-your-machine-learning-model-cross-validation-techniques-with-python-code/					
	1. Flach, P. (2015). Machine Learning: The Art and Science of Algorithms that Make Sense of Data. Cambridge University Press						
	2. Mitchell, T.M. (2017). Machine Learning. McGraw Hill Education.						
	Additional References:						
	3. Christopher & Bishop, M. (2016). Pattern Recognition and Machine Learning. New York: Springer-Verlag						