This homework entails multiple algorithm implementations and so there will be a slightly higher weightage for description of your methods and discussions of results.

Please ensure all plots are legible in the printed version, with correct labels, titles, units, legends, and captions as applicable.

Methods (30 % of pts), results (60% of pts), discussion (10% of pts)

BME students

	method	result	discussion	total
Problem1 (perceptron)	6	12 both linearly-separable and non-linearly separable data classification result, their error vs # of iteration, decision boundary.	2	20
Problem2 (LMS)	6	12 same as problem 1	2	20
Problem3 (SOM)	6	12 show lattice SOM graph for >=2 distribution data sets (ex. Gaussian and uniform); show at least initial and final position of lattice for each data set	2	20
Problem4 (Neural Network)	12	24 plots showing prediction error for different digits as a function of iterations (say, over 100 and/or 200 iterations). Final classification percentage for each digit (in a table) and overall performance.	4	40

Non-BME students (**see results section above for required plots**)

	method	result	discussion	total
Problem1	12	24	4	40
Problem2	9	18	3	30
Problem3	9	18	3	30