

1. What is the difference in the implementation of the Bayes and Naïve Bayes model
2. Create a python file called util.py which hosts a pre_process_data() function that takes in the data and preprocesses it
 - a. Read in the data
 - b. Change the labels (N = 0, Y = 1)
 - c. Drop Dependents, LoanID and LoanAmountTerm columns
 - d. Normalize the LoanAmount, ApplicantIncome and CoapplicantIncome columns using the MinMax Scaler so that it's between 0 and 1
 - e. Change Property column (Rural = 0, Semiurban = 0.5, Urban = 1)
 - f. Drop all rows with missing data
3. Code the KNN model class with comments explaining every step
4. For K = 1 to 8, give a list of train accuracy scores and test accuracy stores
5. Plot a graph of the test scores against k and train scores against k correctly labeled
6. What do you notice about k from the graph? Which do you think is the suitable k? and why?
7. Code the Perceptron model with comments explaining every step (Recall you have to add a condition in your preprocessing function that changed the labels (N= -1, Y = 1) for the Perceptron model
8. Plot a graph of the costs
9. Why did you choose your learning rate and epochs?
10. What can you do to increase train and test accuracy?