

## **Sub : 802 : AI\_ML Practical Exercise3**

**Submission Date: 11-02-2026**

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1. Write a program to implement the naïve Bayesian classifier for a sample training data set stored as a .CSV file. Compute the accuracy of the classifier, considering few test data sets. (dataset: pima\_indian.csv)
2. Write a program to construct a Bayesian network considering medical data. Use this model to demonstrate the diagnosis of heart patients using standard Heart Disease Data Set. Calculate the accuracy, precision, and recall for your data set. (dataset: heart.csv)
3. Write a program to implement the kNN classifier for a sample training data set stored as a .CSV file. Compute the accuracy of the classifier, considering few test data sets. Also calculate the accuracy, precision, and recall for your data set(dataset: titanic.csv)
4. Write a program to implement the kNN classifier for a sample training data set stored as a .CSV file. Compute the accuracy of the classifier, considering few test data sets. Also calculate the accuracy, precision, and recall for your data set(dataset: winequalityN.csv)
5. Write a program to implement the naïve Bayesian classifier and the kNN classifier for a sample training data set stored as a .CSV file. Compute the accuracy of the classifier, considering few test data sets and compare both algorithms. Also calculate the accuracy, precision, and recall for your data set(dataset: customer\_churn.csv)
6. Write a program to implement the naïve Bayesian classifier and the kNN classifier for a sample training data set stored as a .CSV file. Also compute performance matrices for the said algorithm and predict the outcome for user input (dataset: winequalityN.csv)