* We have been provided with 7 data sets-

1. Tic-Tac-Toe dataset
2. SPECT heart dataset
3. Soybean data set
4. Shuttle-landing data set
5. Monks1
6. Monks2
7. Monks3

* For all these data sets, I’ve found the **classification accuracy** of all data sets (as the ratio of the test samples the algorithm has correctly classified and the total number of test samples) in a single python script **using Naïve Bayes’ Theorem**.
* For the data sets- Tic-tac-toe, Shuttle landing and Soybean- I did **leave- one out cross validation**, i.e. taking a row as a testing data at a time and all the other rows as the training data, and then predicting if the training data gives us the values obtained in the testing data.
* For the data sets- SPECT heart, Monks1,2 and 3, **testing data sets were provided** and I performed Bayes’ theorem on all testing data to get the resultant accuracies.
* My script displays the following output-

**Tic Tac Toe**- 0.6941544885177453

**SPECT**- 0.7754010695187166

**Soybean**- 0.8936170212765957

**Shuttle-landing**- 0.3333333333333333

**Monks 1**- 0.7129629629629629

**Monks 2**- 0.6157407407407407

**Monks 3**- 0.9722222222222222