**ReadMe:**

1. This code base works on Python 3.5 or 3.X above
2. The dataset “**arrhythmia.data**” should be present in the same folder as the codebase
3. Various python dependencies are required to execute this code:
   1. Pandas for CSV read and matrix transform
   2. Scikit Learn for Machine Learning Algorithm
   3. *Scitkit learn model selection train\_test\_split function works on 3.5*
   4. Matplot lib for graph plotting

**Execution Process:**

I have implemented user input feature for ease of execution.

When the code is run from the terminal after complying to the above dependencies:

**Please type value from 1 to 6 to perform the below indicated operation:**

1. Logistic Regression only

2. Linear SVM only

3. ANOVA SVM only

4. All estimators

5. Logistic Regression accuracy graph. This runs for different PCA dimensions. (This is time consuming)

6. SVM accuracy graph. This runs for different PCA dimensions. (This is time consuming)

When the user enters an integer value from the above range (1 to 6) the appropriate classifier is executed and the accuracy precision is calculated.

When 5 and 6 are executed the PCA vs accuracy graph is obtained for visual perception.