**Purpose**

The purpose of this project is to use support vector machine to write R script to predict a classification based upon given variables.

The given dataset consists of 101 animals from a zoo. There are 16 variables with various traits to describe the animals. The 7 class types are: Mammal, Bird, Reptile, Fish, Amphibian, Bug, and Invertebrate. The purpose for this dataset is to be able to predict the classification of the animals, based upon the variables.

There are two files included in this dataset.

1. Zoo.csv: Attribute Information: (name of attribute and type of value domain are described in the dataset)
2. Class.csv: This csv describes the dataset
   1. Class\_Number Numeric (integer values in range [1,7])
   2. Number\_Of\_Animal\_Species\_In\_Class Numeric
   3. Class\_Type character -- The actual word description of the class
   4. Animal\_Names character -- The list of the animals that fall in the category of the class