

### **Task Description**

The goal of the experiment was to classify pictures based on the Images.csv given. We created  $n = \{3, 5, 10, 15\}$  images per class depending the experiment.

### **Experiment Setup**

Using the given CSV file "Images.csv", we preprocessed our data and extracted  $n$  images per class.

We then used this file to generate our  $y_{train}$  which contains the class names of the objects to be classified. We also generated our  $x_{train}$  from the **EdgeHistogram.csv**, which contains the feature vectors of the object of a given class.

We used the Logistic Regression model with the max number of iterations set to 5000

### **Presentation of Results**

Using our logistic regression model with the max number of iterations set to 5000, we achieved the following results:

No of images	Accuracy
3	29.68
5	38.60
10	46.28
15	51.21

### **Discussion of Results**

It is clear according to our results that the number of images is proportional to the accuracy i.e the higher the images the higher the accuracy.