Brain Tumor Classification

Detailed Document

Question - 4

Aim :-

From the given dataset, Detect the Brain Tumor using Python (without using sklearn, openCV). Implement the Python Code in AWS Lambda function. Create an AWS API for the lambda function and display the results by executing the API using python.

Solution :-

The given dataset contains the 3762 images of the brain and the CSV file contains the target class and details of 3762 images. The testing dataset contains 1645 details of image.It is done with the python code without using the sklearn, openCV libraries. It is done with the required preprocessing and the training and the testing of the model.

The preprocessing for the image has been done as reshaping(128, 128) , converting into float, scaling the image, converting into numpy array and normalization. The graph is plotted for cost value which says the gradual decrease in the cost value.

The machine learning algorithm used for this project is logistic regression, which is mostly used for classification. We got 43.8% accuracy after 1000 iterations