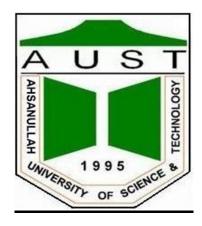
#### **AHSANULLAH UNIVERSITY OF SCIENCE & TECHNOLOGY**



#### **Department of Computer Science & Engineering**

**Course No: CSE 4238** 

**Course Name: Soft Computing Lab** 

Section: B Lab Group: B2

Semester: Fall 2020, Assignment No: 3

#### **Submitted By:**

Name: Shifat Islam

**ID:** 17.01.04.100

#### **Dataset 2:**

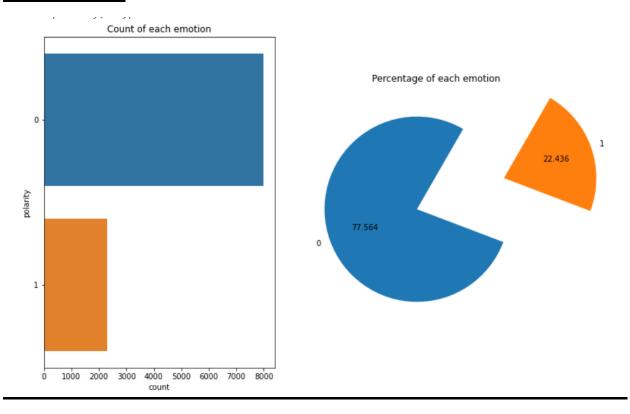
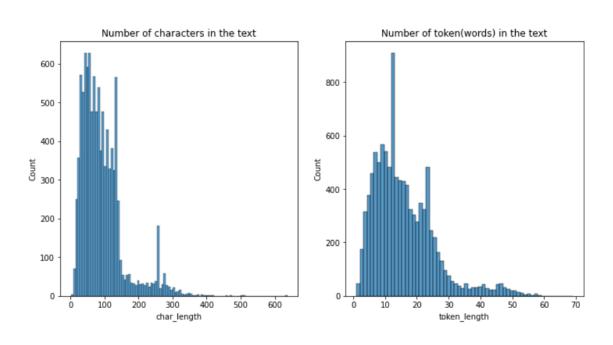


Fig: Percentage of data in dataset

#### **Text Analysis:**



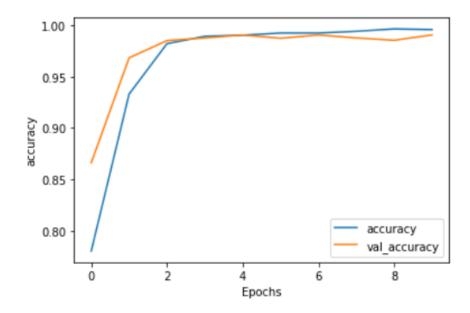
## **Bi-LSTM Model Using Dataset 2:**

| Hyperparameter:     |     |  |  |  |
|---------------------|-----|--|--|--|
| Lstm Nodes          | 32  |  |  |  |
| Hidden Layer        | 3   |  |  |  |
| Embedding Dimension | 50  |  |  |  |
| Epoch               | 10  |  |  |  |
| Batch Size          | 256 |  |  |  |
| Verbose             | 2   |  |  |  |
| Test Size           | 0.3 |  |  |  |

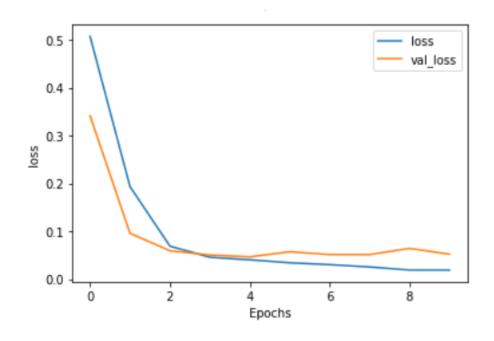
# Result Analysis:

|              | Precision | Recall | F1-score | Support |
|--------------|-----------|--------|----------|---------|
| 0            | 0.99      | 1.00   | 0.99     | 2372    |
| 1            | 0.99      | 0.97   | 0.98     | 723     |
| Accuracy     |           |        | 0.99     | 3095    |
| Macro avg    | 0.99      | 0.98   | 0.99     | 3095    |
| Weighted avg | 0.99      | 0.98   | 0.99     | 3095    |

## Accuracy:



# <u>Loss:</u>



## **Git-hub link:**

https://github.com/ShifatIslam/Soft-Computing-Assignment/tree/Assignment-3