Date of Experiment: 03-03-2022 Date of Submission: 13-03-2022

Using SVM

Colab Link:

https://colab.research.google.com/drive/11li4WRKm3VUcfB1UloYBh5AVBEQu8pic?usp=sharing

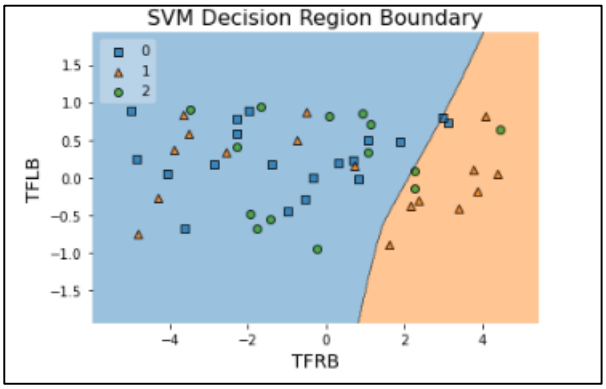
Using a linear kernel

```
Confusion Matrix
[[9 0]
 [4 0]]
Test Set: 13
Accuracy = 69.23076923076923 %
```

Using a sigmoid kernel

```
Confusion Matrix
[[6 3]
 [4 0]]
Test Set: 13
Accuracy = 46.15384615384615 %
```

SVM Decision Region Boundary




```
X = df[['TFRB', 'TFLB']]
y = df['Rating']
```

Conclusion:

Thus, using the support vector classifier we obtain an accuracy of 69%. The SVM algorithm clearly helps us to differentiate between the 2 regions.