Logistic Regression Report

Classification Report

```
precision recall f1-score support
```

```
Case Based
                     0.90
                            0.90
                                   0.90
                                           135
 Genetic_Algorithms
                       0.96
                               0.96
                                      0.96
                                             184
   Neural Networks
                              0.90
                       0.86
                                     0.88
                                            281
Probabilistic_Methods
                        0.93
                               0.90
                                      0.91
                                              154
Reinforcement_Learning
                                                115
                          0.98
                                 0.90
                                        0.94
    Rule_Learning
                     0.92
                            0.93
                                   0.92
                                           72
        Theory
                         0.88
                  0.88
                                88.0
                                        145
```

accuracy 0.91 1086 macro avg 0.92 0.91 0.91 1086 weighted avg 0.91 0.91 0.91 1086

Insights during training the model:

- 1. As we increase the size of the embeddings , the better it is for the model to classify i.e better accuracy
- 2. During node embeddings for small random walks lengths the node embeddings are not giving better representation, not able to show the relationships between the nodes
- 3. As we increase the no of epochs in word2vec model we are able to get better representations.
- 4. Accuracy of the logistic regression model highly depends on the node embeddings the better the embeddings are the higher the accuracy will be.