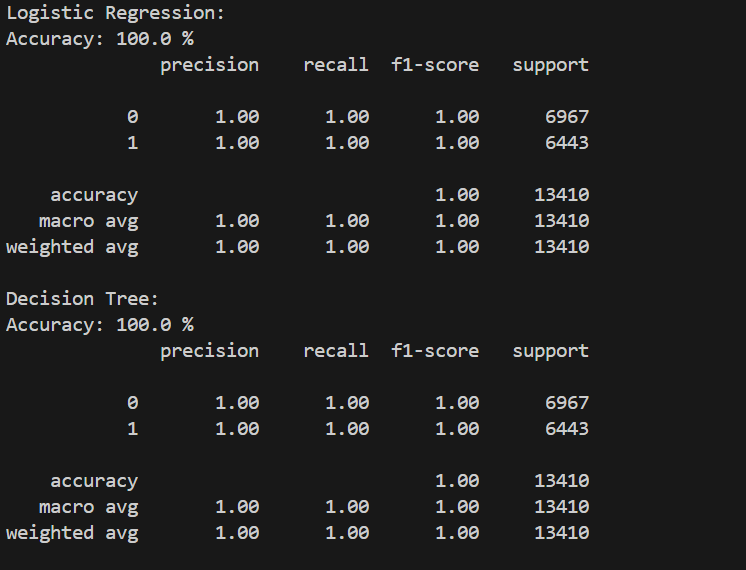
**Fake News Detection**

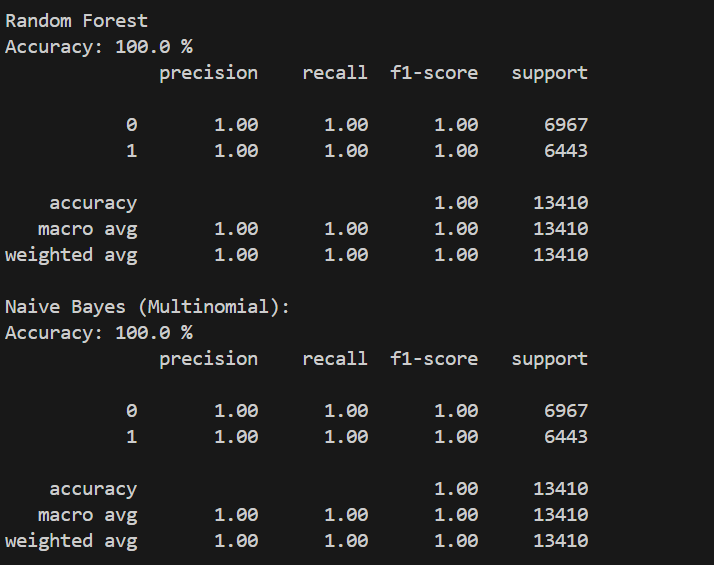
**-Vaibhav Sodhi**

**# Classification Report Table**

**The below results show the accuracy of the model while it is being trained.**

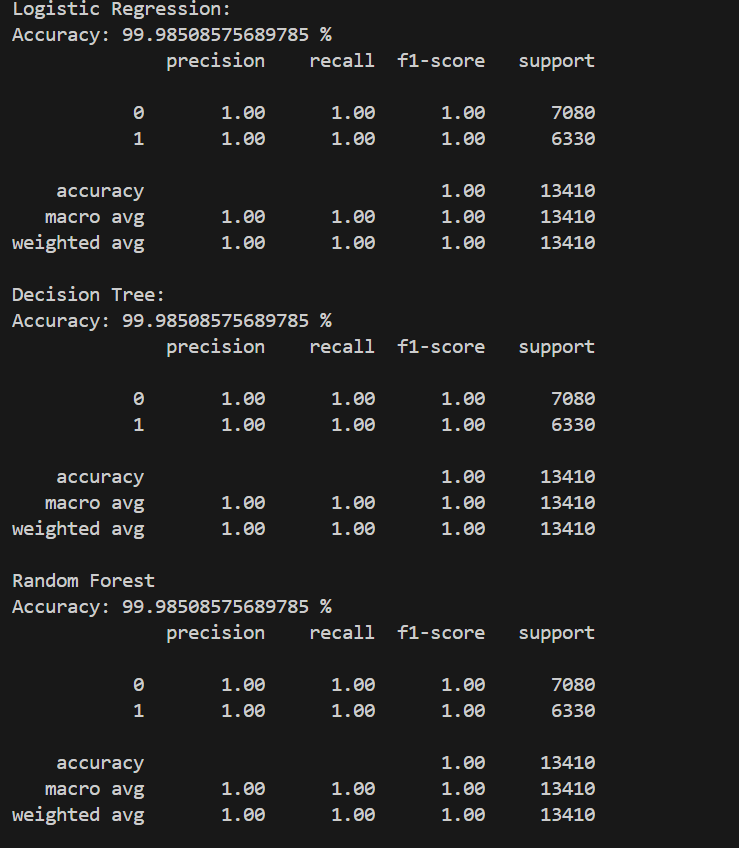
1. Feature Extracted: **Term Frequency-Inverse Document Frequency (TF-IDF)**

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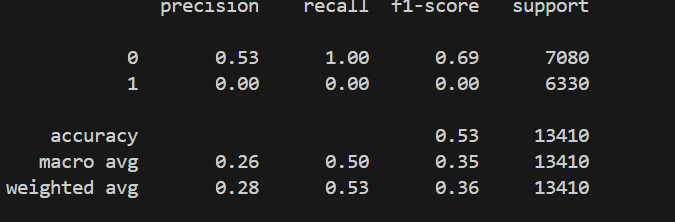
****

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Classifier** | **Accuracy** | **Precision (0)** | **Recall (0)** | **F1-Score (0)** | **Precision (1)** | **Recall (1)** | **F1-Score (1)** | **Avg**  **Precisi**  **on** |
| Logistic Regression | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Decision Tree | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Random Forest | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Naive Bayes | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

**2)** Feature Extracted**: Word Count**

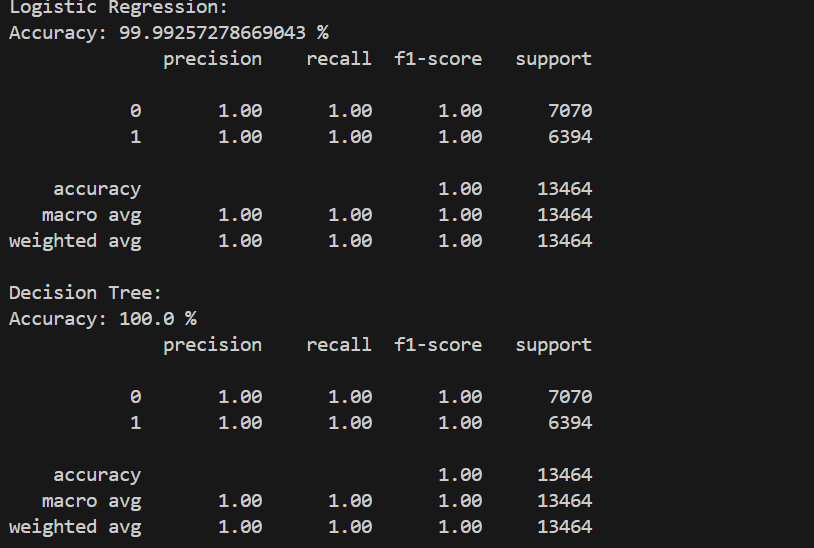
****

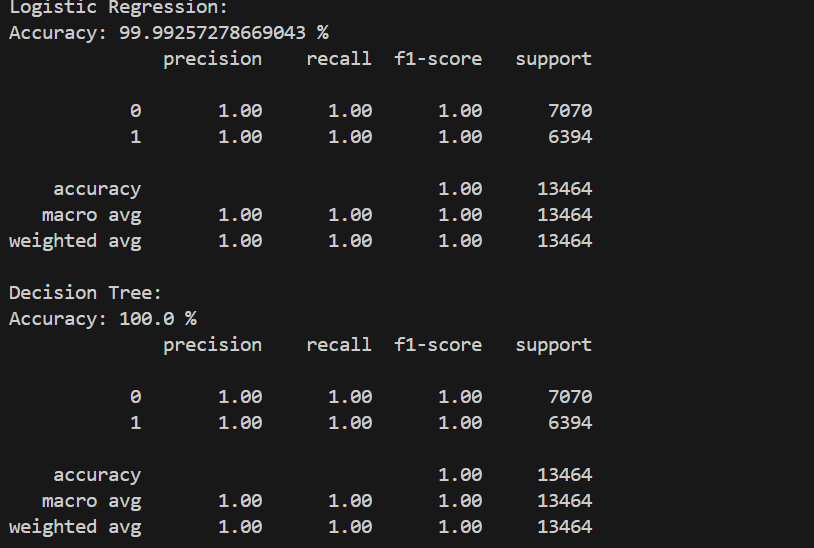
****

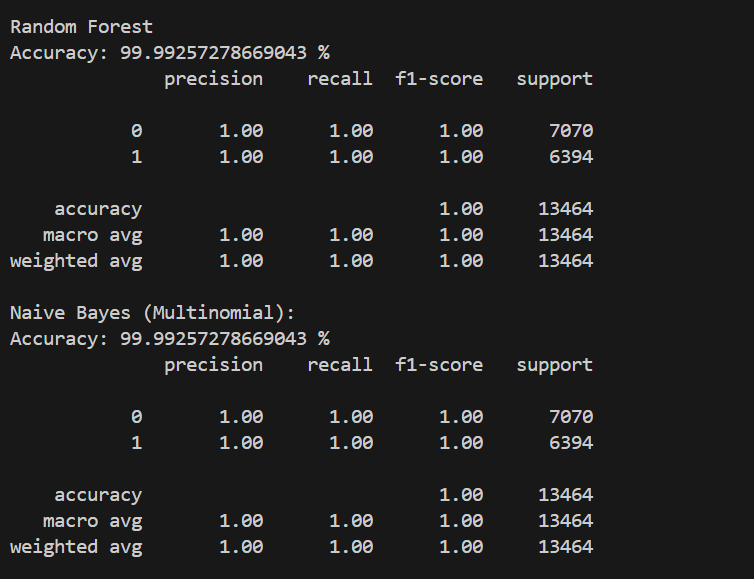
****

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Classifier** | **Accuracy** | **Precision (0)** | **Recall (0)** | **F1-Score (0)** | **Precision (1)** | **Recall (1)** | **F1-Score (1)** | **Avg Precision** |
| Logistic Regression | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Decision Tree | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Random Forest | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Naive Bayes | 0.52 | 0.53 | 1.00 | 0.69 | 0.00 | 0.00 | 0.00 | 0.26 |

3): Feature Extracted: **N-Gram Count**

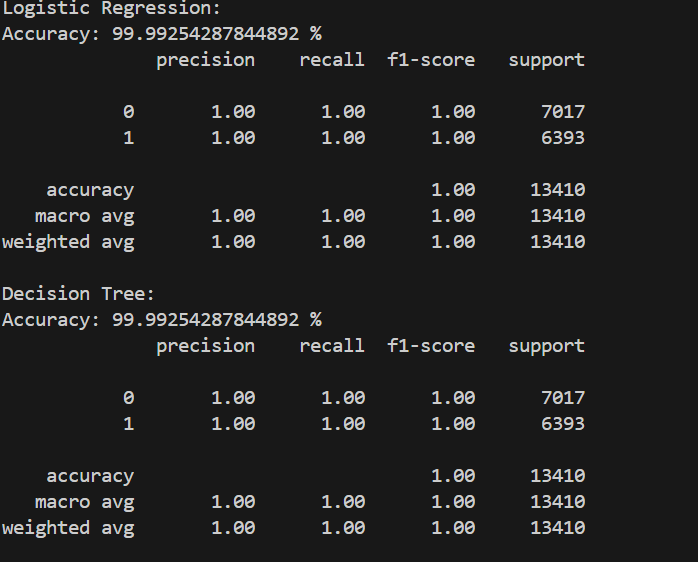


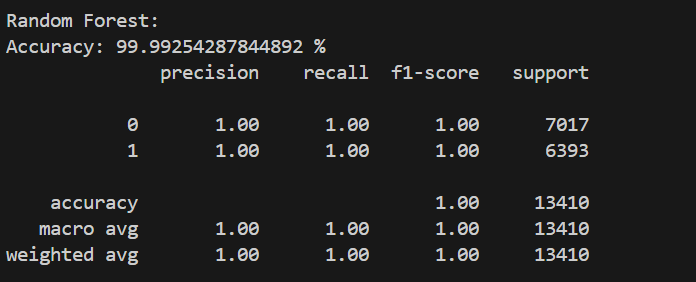




|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Classifier** | **Accuracy** | **Precision (0)** | **Recall (0)** | **F1-Score (0)** | **Precision (1)** | **Recall (1)** | **F1-Score (1)** | **Avg Precision** |
| Logistic Regression | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Decision Tree | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Random Forest | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Naive Bayes | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

4): Feature Extracted: **Sentiment Analysis**

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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Classifier** | **Accuracy** | **Precision (0)** | **Recall (0)** | **F1-Score (0)** | **Precision (1)** | **Recall (1)** | **F1-Score (1)** | **Avg Precision** |
| Logistic Regression | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Decision Tree | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Random Forest | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |