|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ML** | Model name | Accuracy | precision | recall | f1-score | support |
|  | Logistic Regression | 0.54 | 0.53 | 0.54 | 0.53 | 1594 |
|  | Support Vector Machine | 0.53 | 0.53 | 0.53 | 0.53 | 1594 |
|  | Naive Bayes(Multinomial) | 0.48 | 0.53 | 0.48 | 0.40 | 1594 |
|  | Randomforest n\_estimators=300 | 0.53 | 0.59 | 0.53 | 0.53 | 1594 |
|  | GradientBoostingClassifier | 0.54 | 0.55 | 0.54 | 0.53 | 1594 |
|  | Ensemble Classifier | 0.53 | 0.52 | 0.53 | 0.51 | 1594 |
|  | AdaBoost with Random Forest Classifier | 0.54 | 0.56 | 0.54 | 0.53 | 1594 |
|  |  |  |  |  |  |  |
| **DL** | FacebookAI\_xlm\_roberta\_base | 0.68 | 0.68 | 0.68 | 0.68 | 573 |
|  | distilbert\_distilbert\_base\_uncased | 0.52 | 0.52 | 0.52 | 0.52 | 573 |
|  | google\_bert\_bert\_base\_multilingual\_cased | 0.64 | 0.64 | 0.64 | 0.64 | 573 |
|  | sagorsarker\_bangla\_bert\_base | 0.65 | 0.65 | 0.65 | 0.65 | 573 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**F1- score table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **f1-score** | **ML** | Model name | **positive** | **neutral** | **negative** |
|  |  | Logistic Regression | 0.63 | 0.47 | 0.46 |
|  |  | Support Vector Machine | 0.62 | 0.47 | 0.46 |
|  |  | Naive Bayes(Multinomial) | 0.62 | 0.14 | 0.35 |
|  |  | Randomforest n\_estimators=300 | 0.55 | 0.56 | 0.45 |
|  |  | GradientBoostingClassifier | 0.61 | 0.53 | 0.44 |
|  |  | Ensemble Classifier | 0.63 | 0.42 | 0.44 |
|  |  | AdaBoost with Random Forest Classifier | 0.61 | 0.55 | 0.38 |
|  |  |  |  |  |  |
|  | **DL** | FacebookAI\_xlm\_roberta\_base | 0.67 | 0.60 | 0.75 |
|  |  | distilbert\_distilbert\_base\_uncased | 0.52 | 0.45 | 0.57 |
|  |  | google\_bert\_bert\_base\_multilingual\_cased | 0.60 | 0.63 | 0.69 |
|  |  | sagorsarker\_bangla\_bert\_base | 0.64 | 0.61 | 0.61 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |