|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Linear SVC | | | | |
| predict tweets | F1 score | Precision | recall | accurancy |
| Positive | 3112 | 2235 | 0.62 | 0.74 | 0.53 |  |
| Negative | 1113 | 1787 | 0.32 | 0.26 | 0.42 |  |
| Neutral | 0 | 203 | 0.00 | 0.00 | 0.00 |  |
| Avg/total | |  | 0.54 | 0.61 | 0.50 | 0.50082 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Multinomial NB | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 3112 | 2386 | 0.64 | 0.74 | 0.57 |  | |
| Negative | 1113 | 1829 | 0.33 | 0.27 | 0.44 |  | |
| Neutral | 0 | 10 | 0.00 | 0.00 | 0.00 |  | |
| Avg/total | |  | 0.56 | 0.61 | 0.53 | 0.53136 | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Logistic Regression | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 3112 | 2307 | 0.63 | 0.74 | 0.55 |  | | |
| Negative | 1113 | 1624 | 0.31 | 0.27 | 0.39 |  | | |
| Neutral | 0 | 294 | 0.00 | 0.00 | 0.00 |  | | |
| Avg/total | |  | 0.55 | 0.62 | 0.51 | 0.506745 | | |

Dataset: Twitter Global warming

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Linear SVC | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 182 | 288 | 0.62 | 0.51 | 0.80 |  | |
| Negative | 177 | 203 | 0.68 | 0.64 | 0.73 |  | |
| Neutral | 139 | 7 | 0.07 | 0.71 | 0.04 |  | |
| Avg/total | |  | 0.49 | 0.61 | 0.56 | 0.5622489 | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Multinomial NB | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 182 | 268 | 0.62 | 0.52 | 0.76 |  | |
| Negative | 177 | 230 | 0.67 | 0.60 | 0.77 |  | |
| Neutral | 139 | 0 | 0.00 | 0.00 | 0.00 |  | |
| Avg/total | |  | 0.47 | 0.40 | 0.55 | 0.55421 | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Logistic Regression | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 182 | 285 | 0.63 | 0.51 | 0.80 |  | |
| Negative | 177 | 206 | 0.70 | 0.65 | 0.76 |  | |
| Neutral | 139 | 7 | 0.05 | 0.57 | 0.03 |  | |
| Avg/total | |  | 0.49 | 0.58 | 0.57 | 0.570281 | |

Dataset: Sentiment140 Test data

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Linear SVC | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 422 | 744 | 0.14 | 0.11 | 0.19 |  | | |
| Negative | 1219 | 908 | 0.31 | 0.37 | 0.27 |  | | |
| Neutral | 2162 | 2151 | 0.60 | 0.60 | 0.60 |  | | |
| Avg/total | |  | 0.46 | 0.47 | 0.45 | 0.450696 | | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Multinomial NB | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 422 | 1194 | 0.17 | 0.11 | 0.32 |  | |
| Negative | 1219 | 1437 | 0.39 | 0.36 | 0.42 |  | |
| Neutral | 2162 | 1172 | 0.44 | 0.62 | 0.34 |  | |
| Avg/total | |  | 0.39 | 0.48 | 0.36 | 0.36208 | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Logistic Regression | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 422 | 922 | 0.16 | 0.11 | 0.25 |  | |
| Negative | 1219 | 1082 | 0.34 | 0.36 | 0.32 |  | |
| Neutral | 2162 | 1799 | 0.56 | 0.61 | 0.51 |  | |
| Avg/total | |  | 0.44 | 0.48 | 0.42 | 0.419142 | |

Dataset: Apple Twitter Sentiment DFE

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Linear SVC | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 2978 | 4375 | 0.38 | 0.32 | 0.47 |  | |
| Negative | 571 | 1161 | 0.10 | 0.07 | 0.15 |  | |
| Neutral | 5542 | 3555 | 0.48 | 0.62 | 0.39 |  | |
| Avg/total | |  | 0.43 | 0.49 | 0.41 | 0.40567 | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Multinomial NB | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 2978 | 6563 | 0.44 | 0.32 | 0.71 |  | |
| Negative | 571 | 2073 | 0.11 | 0.07 | 0.25 |  | |
| Neutral | 5542 | 455 | 0.09 | 0.61 | 0.05 |  | |
| Avg/total | |  | 0.21 | 0.48 | 0.28 | 0.27829 | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of tweets in the Dataset | Logistic Regression | | | | | |
| predict tweets | F1 score | Precision | recall | | accurancy |
| Positive | 2978 | 4949 | 0.41 | 0.33 | 0.55 |  | |
| Negative | 571 | 1629 | 0.11 | 0.08 | 0.22 |  | |
| Neutral | 5542 | 2513 | 0.39 | 0.63 | 0.29 |  | |
| Avg/total | |  | 0.38 | 0.50 | 0.37 | 0.368716 | |

Dataset: Twitter Product Company