**- As coletas do tweets foram feitas separadas para cada quantidade;**

**- A matriz de confusão está na seguinte ordem: Negativo, Neutro e Positivo (tanto na vertical quanto na horizontal);**

**- Ambos data sets (treino e teste) não foram supervisionados;**

**NAIVE BAYES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **200 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.16 | 0.89 | 0.28 | 244 |
| **NEUTRO** | 0.46 | 0.05 | 0.08 | 801 |
| **POSITIVO** | 0.40 | 0.09 | 0.15 | 455 |
| **ACCURACY** |  |  | 0.20 | 1500 |
| **MACRO AVG** | 0.34 | 0.34 | 0.17 | 1500 |
| **WEIGHTED AVG** | 0.40 | 0.20 | 0.14 | 1500 |

**Matriz de Confusão – 200 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **400 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.95 | 0.29 | 244 |
| **NEUTRO** | 0.55 | 0.04 | 0.08 | 801 |
| **POSITIVO** | 0.54 | 0.10 | 0.17 | 455 |
| **ACCURACY** |  |  | 0.21 | 1500 |
| **MACRO AVG** | 0.42 | 0.36 | 0.18 | 1500 |
| **WEIGHTED AVG** | 0.48 | 0.21 | 0.14 | 1500 |

**Matriz de Confusão – 400 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **600 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.90 | 0.29 | 244 |
| **NEUTRO** | 0.60 | 0.07 | 0.12 | 801 |
| **POSITIVO** | 0.57 | 0.16 | 0.25 | 455 |
| **ACCURACY** |  |  | 0.23 | 1500 |
| **MACRO AVG** | 0.45 | 0.38 | 0.22 | 1500 |
| **WEIGHTED AVG** | 0.52 | 0.23 | 0.19 | 1500 |

**Matriz de Confusão – 600 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **800 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.88 | 0.29 | 244 |
| **NEUTRO** | 0.64 | 0.07 | 0.12 | 801 |
| **POSITIVO** | 0.58 | 0.20 | 0.30 | 455 |
| **ACCURACY** |  |  | 0.24 | 1500 |
| **MACRO AVG** | 0.47 | 0.38 | 0.24 | 1500 |
| **WEIGHTED AVG** | 0.55 | 0.24 | 0.20 | 1500 |

**Matriz de Confusão – 800 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1000 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.88 | 0.29 | 244 |
| **NEUTRO** | 0.63 | 0.08 | 0.14 | 801 |
| **POSITIVO** | 0.62 | 0.20 | 0.31 | 455 |
| **ACCURACY** |  |  | 0.25 | 1500 |
| **MACRO AVG** | 0.47 | 0.39 | 0.24 | 1500 |
| **WEIGHTED AVG** | 0.55 | 0.25 | 0.21 | 1500 |

**Matriz de Confusão – 1000 Tweets**

**SUPPORT VECTOR MACHINE – SVM**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **200 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.74 | 0.28 | 244 |
| **NEUTRO** | 0.56 | 0.14 | 0.23 | 801 |
| **POSITIVO** | 0.34 | 0.18 | 0.23 | 455 |
| **ACCURACY** |  |  | 0.25 | 1500 |
| **MACRO AVG** | 0.36 | 0.35 | 0.25 | 1500 |
| **WEIGHTED AVG** | 0.43 | 0.25 | 0.24 | 1500 |

**Matriz de Confusão – 200 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **400 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.95 | 0.29 | 244 |
| **NEUTRO** | 0.46 | 0.02 | 0.04 | 801 |
| **POSITIVO** | 0.51 | 0.10 | 0.17 | 455 |
| **ACCURACY** |  |  | 0.20 | 1500 |
| **MACRO AVG** | 0.38 | 0.36 | 0.16 | 1500 |
| **WEIGHTED AVG** | 0.43 | 0.20 | 0.12 | 1500 |

**Matriz de Confusão – 400 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **600 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.18 | 0.89 | 0.29 | 244 |
| **NEUTRO** | 0.62 | 0.06 | 0.11 | 801 |
| **POSITIVO** | 0.57 | 0.23 | 0.33 | 455 |
| **ACCURACY** |  |  | 0.25 | 1500 |
| **MACRO AVG** | 0.46 | 0.39 | 0.24 | 1500 |
| **WEIGHTED AVG** | 0.53 | 0.25 | 0.21 | 1500 |

**Matriz de Confusão – 600 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **800 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.17 | 0.87 | 0.29 | 244 |
| **NEUTRO** | 0.66 | 0.09 | 0.16 | 801 |
| **POSITIVO** | 0.59 | 0.22 | 0.32 | 455 |
| **ACCURACY** |  |  | 0.26 | 1500 |
| **MACRO AVG** | 0.48 | 0.40 | 0.26 | 1500 |
| **WEIGHTED AVG** | 0.56 | 0.26 | 0.23 | 1500 |

**Matriz de Confusão – 800 Tweets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1000 TWEETS** | | | | |
|  | **PRECISION** | **RECALL** | **F1-SCORE** | **SUPPORT** |
| **NEGATIVO** | 0.18 | 0.86 | 0.30 | 244 |
| **NEUTRO** | 0.58 | 0.14 | 0.22 | 801 |
| **POSITIVO** | 0.65 | 0.19 | 0.30 | 455 |
| **ACCURACY** |  |  | 0.27 | 1500 |
| **MACRO AVG** | 0.47 | 0.40 | 0.27 | 1500 |
| **WEIGHTED AVG** | 0.54 | 0.27 | 0.26 | 1500 |

**Matriz de Confusão – 1000 Tweets**