|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Criminal Damage** | | | |
| **From: CD\_D** | **Into: CD\_D** | | |
| **0** | **1** | **Total** |
| **0** | 70246 | 103781 | 174027 |
| 40.37 | 59.63 |  |
| **1** | 19298 | 154414 | 173712 |
| 11.11 | 88.89 |  |
| **Total** | 89544 | 258195 | 347739 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Narcotics** | | | |
| **From: Narotics\_D** | **Into: Narcotics\_D** | | |
| **0** | **1** | **Total** |
| **0** | 141980 | 17180 | 159160 |
| 89.21 | 10.79 |  |
| **1** | 1042 | 157425 | 158467 |
| 0.66 | 99.34 |  |
| **Total** | 143022 | 174605 | 317627 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Motor Vehicle Theft** | | | |
| **From: MVT\_D** | **Into: MVT\_D** | | |
| **0** | **1** | **Total** |
| **0** | 30714 | 38544 | 69258 |
|  | 44.35 | 55.65 |  |
| **1** | 11268 | 58258 | 69526 |
|  | 16.21 | 83.79 |  |
| **Total** | 41982 | 96802 | 138784 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Robbery** | | | |
| **From: Robbery\_D** | **Into: Robbery\_D** | | |
| **0** | **1** | **Total** |
| **0** | 29078 | 28454 | 57532 |
| 50.54 | 49.46 |  |
| **1** | 13511 | 44306 | 57817 |
| 23.37 | 76.63 |  |
| **Total** | 42589 | 72760 | 115349 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Theft** | | | |
| **From: Theft\_D** | **Into: Theft\_D** | | |
| **0** | **1** | **Total** |
| **0** | 491733 | 64419 | 556152 |
| 88.42 | 11.58 |  |
| **1** | 211960 | 107186 | 319146 |
| 66.41 | 33.59 |  |
| **Total** | 703693 | 171605 | 875298 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table of Assault** | | | |
| **From: Assault\_D** | **Into: Assault\_D** | | |
| **0** | **1** | **Total** |
| **0** | 76325 | 17282 | 93607 |
| 81.54 | 18.46 |  |
| **1** | 55466 | 38145 | 93611 |
| 59.25 | 40.75 |  |
| **Total** | 131791 | 55427 | 187218 |

SAS Output:-

|  |  |  |  |
| --- | --- | --- | --- |
| Downsampling | | | |
|  | Precision | Recall | F1 Score |
|  |
| CD | 0.598052 | 0.687323 | 0.639587 |
| Narcotics | 0.901606 | 0.525793 | 0.664226 |
| Robbery | 0.608933 | 0.603756 | 0.606333 |
| MVT | 0.601826 | 0.65479 | 0.627192 |
| Assault | 0.688203 | 0.333231 | 0.449037 |
| Theft | 0.624609 | 0.178966 | 0.278216 |

Python Output:-

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Upsampling | | | | | | |
|  | Precision | | Recall | | F1 Score | |
|  | Logistic | RandomForest | Logistic | RandomForest | Logistic | RandomForest |
| CD | 0.599038 | 0.599246469 | 0.887117 | 0.897194052 | 0.715157 | 0.718558954 |
| Narcotics | 0.902619 | 0.902619322 | 0.993489 | 0.993489193 | 0.945877 | 0.945876815 |
| Robbery | 0.61672 | 0.616719506 | 0.728581 | 0.815917872 | 0.668 | 0.702470108 |
| MVT | 0.602988 | 0.606402174 | 0.837675 | 0.815917872 | 0.701216 | 0.695728606 |
| Assault | 0.680119 | 0.639883442 | 0.418216 | 0.543144461 | 0.517942 | 0.587558664 |
| Theft | 0.623431 | 0.619696936 | 0.336413 | 0.34983431 | 0.437009 | 0.447208382 |