

| Model | Strategy | Recall of Fraud | F1 Score | ROC Score | Accuracy | test_confusion |
|--|---------------------------|-----------------|----------|-----------|----------|------------------------------|
| logistic regression | notscaled unbalanced data | 0.68 | 0.65 | 0.84 | 1.0 | [[85233 59] [49 102]] |
| logistic regression | notscaled balanced data | 0.89 | 0.08 | 0.93 | 0.96 | [[82248 3044] [16 135]] |
| logistic regression | scaled unbalanced data | 0.62 | 0.72 | 0.81 | 1.0 | [[85275 17] [57 94]] |
| logistic regression | scaled balanced data | 0.91 | 0.08 | 0.93 | 0.96 | [[82051 3241] [14 137]] |
| Elastic | scaled balanced data | 0.91 | 0.09 | 0.94 | 0.97 | [[82530 2762] [14 137]] |
| Lasso | scaled balanced data | 0.91 | 0.08 | 0.94 | 0.96 | [[82169 3123] [14 137]] |
| KNN | scaled balanced data | 0.87 | 0.12 | 0.92 | 0.98 | [[83416 1876] [20 131]] |
| GaussianNB | scaled balanced data | 0.85 | 0.07 | 0.91 | 0.96 | [[82107 3185] [22 129]] |
| Decisiontree | scaled balanced data | 0.87 | 0.03 | 0.89 | 0.9 | [[76778 8514] [19 132]] |
| Randomforest classifier | scaled balanced data | 0.9 | 0.1 | 0.94 | 0.97 | [[82986 2306] [15 136]] |
| Decisiontree classifier - Tuned(gridsearch) | scaled balanced data | 0.93 | 0.02 | 0.88 | 0.83 | [[71033 14259] [11 140]] |
| Randomforest classifier - Tuned(gridsearch) | scaled balanced data | 0.88 | 0.13 | 0.93 | 0.98 | [[83553 1739] [18 133]] |
| Decisiontree classifier - Tuned(random gridsearch) | scaled balanced data | 0.92 | 0.04 | 0.92 | 0.92 | [[78121 7171] [12 139]] |
| Randomforest classifier - Tuned(random gridsearch) | scaled balanced data | 0.87 | 0.22 | 0.93 | 0.99 | [[84395 897] [20 131]] |
| Ada boost | scaled balanced data | 0.9 | 0.06 | 0.92 | 0.95 | [[80886 4406] [15 136]] |
| gradient boost | scaled balanced data | 0.89 | 0.08 | 0.93 | 0.96 | [[82251 3041] [16 135]] |
| xgb boost | scaled balanced data | 0.91 | 0.07 | 0.93 | 0.96 | [[81606 3686] [14 137]] |
| votingclassifier1(DT,DT,XBG) | scaled balanced data | 0.9 | 0.1 | 0.94 | 0.97 | [[82910 2382] [15 136]] |
| votingclassifier2(DT,DT,DT) | scaled balanced data | 0.82 | 0.19 | 0.9 | 0.99 | [[84242 1050] [27 124]] |
| votingclassifier3(DT,LR,LR(elastic)) | scaled balanced data | 0.89 | 0.1 | 0.93 | 0.97 | [[82931 2361] [16 135]] |
| votingclassifier4(LR(elastic),DT1,DT2) | scaled balanced data | 0.87 | 0.14 | 0.93 | 0.98 | [[83634 1658] [19 132]] |
| stacking-classifier3(DT,LG,XBG,ada---LR-E) | scaled balanced data | 0.9 | 0.09 | 0.93 | 0.97 | [[82398 2894] [15 136]] |
| stacking-classifier2(DT,LR---LR-E) | scaled balanced data | 0.9 | 0.07 | 0.93 | 0.96 | [[81942 3350] [15 136]] |
| stacking-classifier1(LR(l1),LR,LR(EN)---LR(EN)) | scaled balanced data | 0.91 | 0.08 | 0.94 | 0.96 | [[82218 3074] [14 137]] |
| stacking-classifier(best stacking and voting --- LR) | scaled balanced data | 0.9 | 0.08 | 0.93 | 0.97 | [[82355 2937] [15 136]] |
| votingclassifier1(DT,DT,XBG) | scaled balanced data | 0.87 | 0.08 | 0.92 | 0.97 | [[82439 2853] [19 132]] |