For LS

AUC

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|  | **cbo** | **rfc** | **privateMethodsQty** | **protectedFieldsQty** | **returnQty** | **loopQty** | **uniqueWordsQty** | **modifiers** |
| Decision Tree （CART） | 0.8450 | 0.8289 | 0.8156 | 0.8288 | 0.8323 | 0.8779 | 0.8185 | 0.7841 |
| Random Forest | 0.8685 | 0.8920 | 0.8371 | 0.8921 | 0.8649 | 0.8756 | 0.8925 | 0.8225 |
| LogisticRegression\_liblinear | 0.9214 | 0.9334 | 0.8576 | 0.9334 | 0.9244 | 0.8885 | 0.9637 | 0.8725 |
| Naïve\_bayes\_GaussianNB | 0.8483 | 0.8970 | 0.8261 | 0.8971 | 0.8867 | 0.8601 | 0.9166 | 0.5841 |
| XGBoost | 0.8948 | 0.9414 | 0.8287 | 0.9414 | 0.8904 | 0.8848 | 0.9421 | 0.8465 |
| AdaBoost | 0.8987 | 0.9270 | 0.8341 | 0.9270 | 0.9014 | 0.8828 | 0.9331 | 0.8361 |
| KNN | 0.9210 | 0.9364 | 0.8589 | 0.9386 | 0.9311 | 0.8918 | 0.9632 | 0.8683 |

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|  | **loc** | **wmc** | **lcom** | **fanin** | **fanout** |  |  |  |
| Decision Tree （CART） | 0.9217 | 0.8188 | 0.6334 | 0.8407 | 0.8747 |  |  |  |
| Random Forest | 0.8985 | 0.8795 | 0.7169 | 0.8279 | 0.8771 |  |  |  |
| LogisticRegression\_liblinear | 0.9576 | 0.9458 | 0.6697 | 0.8530 | 0.9092 |  |  |  |
| Naïve\_bayes\_GaussianNB | 0.8052 | 0.9128 | 0.5494 | 0.8131 | 0.8657 |  |  |  |
| XGBoost | 0.9354 | 0.9229 | 0.7844 | 0.8532 | 0.8908 |  |  |  |
| AdaBoost | 0.9294 | 0.9120 | 0.7570 | 0.8550 | 0.8885 |  |  |  |
| KNN | 0.9573 | 0.9431 | 0.7933 | 0.8662 | 0.9176 |  |  |  |