Table 1

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| No. | Algorithm | Accuracy | Hyperparameters |
| 1. | Decision Tree Classifier | 82.28% | Best Hyperparameters: {'criterion': 'entropy', 'max\_depth': None, 'min\_samples\_leaf': 1, 'min\_samples\_split': 2, 'splitter': 'random'} |
| 2. | KNN | 75.98% | Best Hyperparameters: {'algorithm': 'auto', 'n\_jobs': -1, 'n\_neighbors': 19, 'p': 1, 'weights': 'distance'} |
| 3. | Logistic Regression | 71.25% | Best Hyperparameters: {'C': 1.0, 'penalty': 'l2', 'solver': 'lbfgs'} |
| 4. | SVM | 68.11% | Best Hyperparameters: {'C': 0.1, 'gamma': 'scale', 'kernel': 'linear'} |
| 5. | Random Forest | 73.22% | {'max\_depth': 10, 'min\_samples\_leaf': 4, 'min\_samples\_split': 2, 'n\_estimators': 200} |
| 6 | XGBoost | 78.91% | param\_grid\_XGB = {  'n\_estimators': [100, 200, 300],  'max\_depth': [3, 4, 5],  'learning\_rate': [0.1, 0.01, 0.001],  'subsample': [0.8, 0.9, 1.0],  } |

Table 2(Best Overall)

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| No. | Algorithm | Accuracy | Hyperparameters |
| 1. | Decision Tree Classifier | 82.28% | Best Hyperparameters: {'criterion': 'entropy', 'max\_depth': None, 'min\_samples\_leaf': 1, 'min\_samples\_split': 2, 'splitter': 'random'} |