

| Algorithm                 | Test Accuracy | Test Precision | Test Recall | Validation Accuracy | Validation Precision | Validation Recall |
|---------------------------|---------------|----------------|-------------|---------------------|----------------------|-------------------|
| RandomForest Classifier   | 0.961224      | 0.956387       | 0.961224    | 0.928571            | 0.925729             | 0.928571          |
| Support Vector Classifier | 0.957143      | 0.916122       | 0.957143    | 0.904082            | 0.817364             | 0.904082          |

Confusion Matrix for RandomForestClassifier:

|                        | Predicted Average Quality | Predicted High Quality | Predicted Low Quality |
|------------------------|---------------------------|------------------------|-----------------------|
| Actual Average Quality | 468                       | 0                      | 1                     |
| Actual High Quality    | 8                         | 1                      | 0                     |
| Actual Low Quality     | 10                        | 0                      | 2                     |

Confusion Matrix for SVC:

|                        | Predicted Average Quality | Predicted High Quality | Predicted Low Quality |
|------------------------|---------------------------|------------------------|-----------------------|
| Actual Average Quality | 469                       | 0                      | 0                     |
| Actual High Quality    | 9                         | 0                      | 0                     |
| Actual Low Quality     | 12                        | 0                      | 0                     |

S3 bucket name: p4-s3-laxman

S3 data: p4-s3-laxman/data/winequality-white.csv

S3 output: p4-s3-laxman/output/output-metrics.txt