|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | Age | Sex | cp | Trestbps | Chol | Fbs |
| Occurrence in the Highest Accuracy | 2 | 3 | 7 | 2 | 1 | 3 |
| Occurrence in the Highest F-measure | 2 | 6 | 6 | 3 | 1 | 5 |
| Occurrence in the Highest Precision | 3 | 3 | 7 | 4 | 2 | 2 |
| Total Number of Occurrence | 7 | 12 | 20 | 9 | 4 | 10 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Restecg | Thalach | Exang | Oldpeak | Slope | ca | Thal |
| Occurrence in the Highest Accuracy | 4 | 4 | 6 | 3 | 3 | 7 | 7 |
| Occurrence in the Highest F-measure | 4 | 2 | 6 | 4 | 3 | 7 | 7 |
| Occurrence in the Highest Precision | 5 | 6 | 5 | 4 | 0 | 6 | 3 |
| Total Number of Occurrence | 13 | 12 | 17 | 11 | 6 | 20 | 17 |

Conclusion:

In paper sex, cp, Fbs, Restecg, Exang, Oldpeak, Slope, ca and Thal are identified as significant features (Totally 9 features) because all of them occur atleast 10 times.

But the result we got varies a little, it includes the features sex, cp, Fbs, Restecg, Thalach, Exang, Oldpeak, ca and Thal (9 features). Instead of Slope we got Thalach.

|  |  |
| --- | --- |
| Model | Accuracy Average |
| Logistic Regression | 78.42840216 |
| Vote | 78.26473535 |
| SVM | 78.20488293 |
| Naive Bayes | 77.82607351 |
| Decision Tree | 76.44801476 |
| Neural Network | 76.38267206 |
| KNN | 65.70854122 |

|  |  |
| --- | --- |
| Model | Precision Average |
| Vote | 81.59194277 |
| SVM | 79.12408488 |
| Logistic Regression | 79.04521455 |
| Naive Bayes | 78.37897959 |
| Decision Tree | 77.91615814 |
| Neural Network | 77.1020964 |
| KNN | 64.40172328 |

|  |  |
| --- | --- |
| Model | F1 Score Average |
| Logistic Regression | 75.61920793 |
| Naive Bayes | 75.21800616 |
| SVM | 75.21731287 |
| Vote | 74.47840316 |
| Decision Tree | 73.13371665 |
| Neural Network | 73.09896283 |
| KNN | 60.95412461 |