**Iris Dataset** – Multiclass Classification Results

**STAGE I** :

1. Imputer – missing value (strategy = median)
2. No standard scaling

|  |  |  |
| --- | --- | --- |
| **S.NO** | **MODELS** | **ACCURACY** |
| 1. | **LogisticRegression** | 0.93 |
| 2. | **SVC** | 0.90 |
| 3. | **GaussianNB** | 0.90 |
| 4. | **DecisionTreeClassifier** | 0.90 |
| 5. | **RandomForestClassifier** | 0.90 |

**STAGE II** :

1. Imputer – missing value (strategy = median)
2. Standard scaling
3. Feature Engineering

|  |  |  |
| --- | --- | --- |
| **S.NO** | **MODELS** | **ACCURACY** |
| 1. | **LogisticRegression** | 0.87 |
| 2. | **SVC** | 0.87 |
| 3. | **GaussianNB** | 0.90 |
| 4. | **DecisionTreeClassifier** | 0.90 |
| 5. | **RandomForestClassifier** | 0.90 |

**STAGE III** :

1. Imputer – missing value (strategy = median)
2. Standard scaling

|  |  |  |
| --- | --- | --- |
| **S.NO** | **MODELS** | **ACCURACY** |
| 1. | **LogisticRegression** | 0.90 |
| 2. | **SVC** | 0.90 |
| 3. | **GaussianNB** | 0.90 |
| 4. | **DecisionTreeClassifier** | 0.93 |
| 5. | **RandomForestClassifier** | 0.90 |

**CONCLUSION** :

(i) **STAGE I** :

Best preforming model : **LogisticRegression**

(ii) **STAGE II** :

Best preforming model :

|  |
| --- |
| **GaussianNB** |
| **DecisionTreeClassifier** |
| **RandomForestClassifier** |

(iii) **STAGE III** :

Best preforming model : **DecisionTreeClassifier**

(iv) **Overall Best performing model** :

**LogisticRegression & DecisionTreeClassifier**