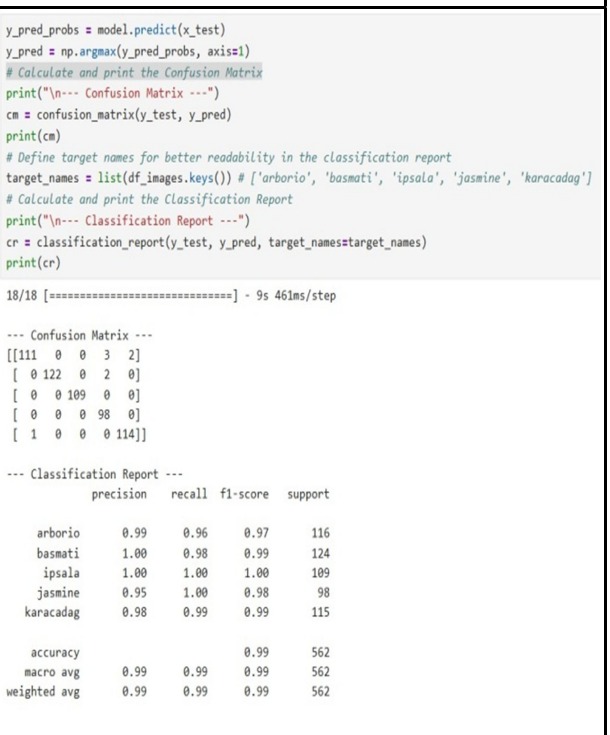
Project Development Phase
Model Performance Test

Date	27 June 2025
Team ID	LTVIP2025TMID41438
Project Name	GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning
Maximum Marks	10 Marks

Model Performance Testing:

Model performance testing :

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Classification Model:** **Confusion Matrix:** [[111 0 0 3 2],[0 122 2 0 0],[0 0 109 0 0],[0 0 0 98 0],[1 0 0 0 114]] **Accuracy Score:** 98.58% **Classification Report:** 1.Arborio → Precision: 0.99,Recall: 0.96, F1: 0.97 2.Basmati → Precision: 1.00,Recall: 0.98, F1: 0.99 3.Ipsala→ Precision: 1.00,Recall: 1.00, F1: 1.00 4.Jasmine → Precision: 1.00,Recall:1.00, F1: 1.00 5.Karacadagi → Precision:0.98,Recall: 0.99, F1: 0.99 Overall Accuracy: **98.58%**	
2.	Tune the Model	**Training Log:**Used MobileNetV2 feature extractor + 2 Dense layers **Validation Accuracy:** Consistently high(98.4%) **Best Epoch Accuracy:** 99.33% **Validation Method:** 70/15/15 split with 10 epochs