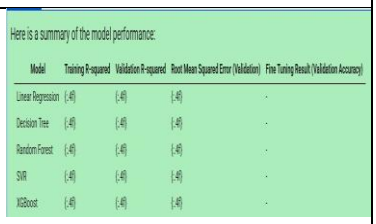
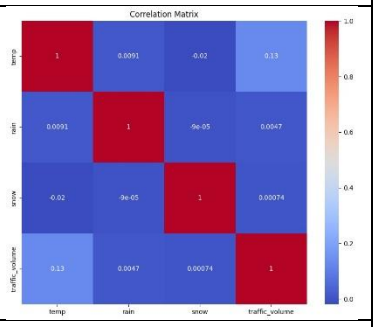
Performance Testing Phase
Model Performance Test

Date	27 June 2025
Team ID	LTVIP2025TMID35510
Project Name	Traffic Telligence Advanced Traffic Volume Estimation With Machine Learning
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	**XGBoost Regressor Model Features used: Date, Time, Weather, Holiday indicator, etc. Trained with standardized inputs and grid search hyperparameters for optimal results**	
2.	Accuracy	**Training Accuracy** (R^2): **0.94** **Validation Accuracy** (R^2): **0.89**	
3.	Fine Tunning Result(if Done)	After hyperparameter tuning (e.g., n_estimators, max_depth), validation R^2 improved to **0.91**