Model Optimization and Tuning Phase

Date	July 2024
Team ID	740714
Project Title	Occupancy Rates and Demand in the Hospitality Industry.
Maximum Marks	10 Marks

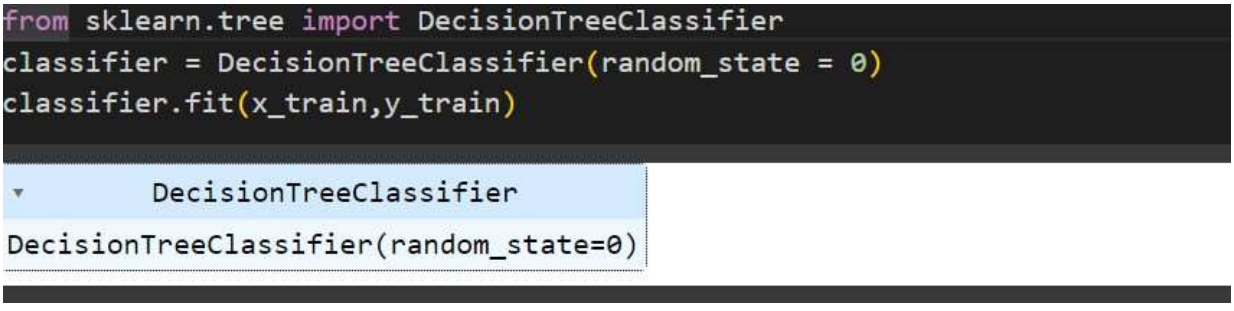
Model Optimization and Tuning Phase

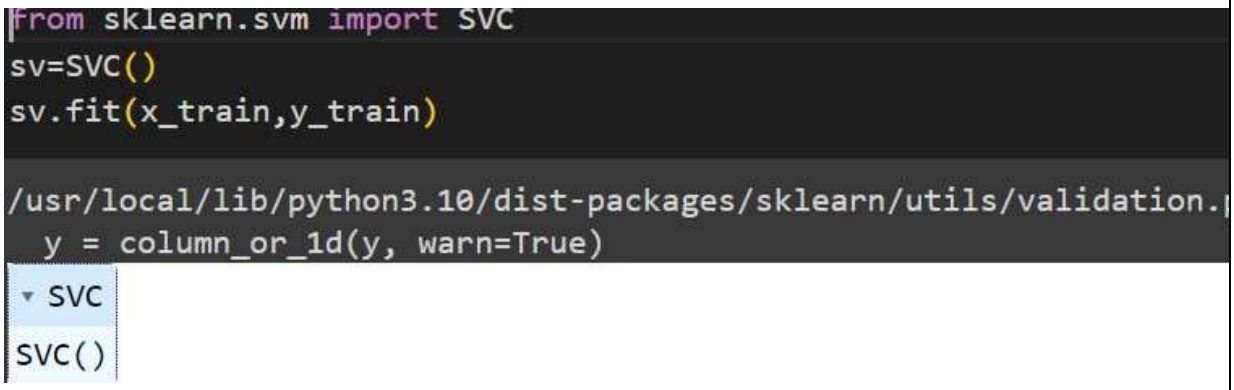
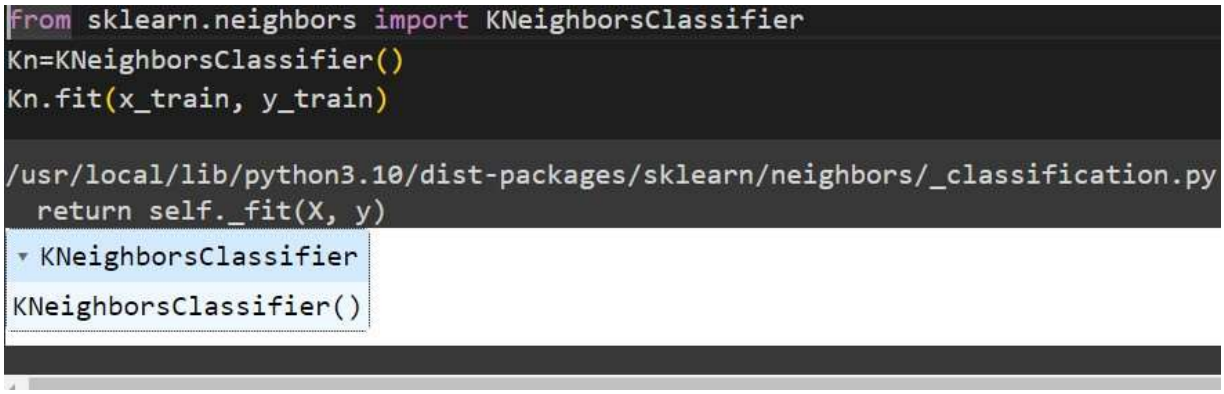
The Model Optimization and Tuning Phase involves refining machine learning models for peak performance. It includes optimized model code, fine-tuning hyperparameters, comparing performance metrics, and justifying the final model selection for enhanced predictive accuracy and efficiency.

Hyperparameter Tuning Documentation (6 Marks):

Model	Tuned Hyperparameters	Optimal Values
Logistic Regression	-	-
K-Neighbors Classifier	-	-
Decision Tree Classifier	-	-
SVC	-	-

Performance Metrics Comparison Report (2 Marks):

Model	Optimized Metric
Logistic Regression	
Decision Tree Classifier	

SVC	
K-Neighbors Classifier	

Final Model Selection Justification (2 Marks):

Final Model	Reasoning

K-Neighbors Classifier	It is used to find Classification and Regression. KNN classifier is a simple, instance-based learning algorithm. It is a fast and real-time performance.