"Scripts to train models and make predictions" succinctly describes the purpose of the scripts. These scripts are responsible for training machine learning models using available data and then using those trained models to make predictions on new or unseen data.

**Predictive Model:**

This model will be a useful tool for making decisions and forecasts in real time for Recommendations for performance improvement. And a trained model which can predict the employee performance based on factors as inputs. This will be used to hire employees

Conduct regular performance reviews to assess progress and identify areas for improvement. Encourage open communication and address any concerns or challenges proactively.Offer constructive feedback on strengths and areas needing improvement.

**Model Performance Evaluation :**

**Decision Tree:**

Validation Accuracy: 1%

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

**Random Forest:**

Validation Accuracy: 90.55%

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

**Supper Vector Machine:**

Validation Accuracy: 72.50%

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

**Gradient boosting**

Validation Accuracy: 94.16

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

**K\_Nearest Neighbors:**

Validation Accuracy: 72.50%

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

**Artificial Nueral Network (ANN):**

Validation Accuracy: 72.22%

Strengths: Capable of handling high-dimensional data, strong against overfitting, and high accuracy.

Considering: Additional processing power might be needed.

