The Linear regression Model Prediction values:

```
Mean Squared Error: 9776777038.907291
Predicted Price for the first test sample: 1499437.8040576195
```

The Polynomial regression Model Prediction Values:

```
Predicted Price for the first test sample: 1499437.8040576195

Polynomial Regression
Mean Squared Error: 9776777038.907291
```

The Decision Tree Regression Model Prediction Values:

```
Predicted Price for the first test sample: 1538039.5989438992

Decision Tree Regression
Mean Squared Error: 27070250149.41626
```

Random forest Algorithm:The main purpose of the random forest regression is predicting the numerical values. It combines the predictions of overfitting and improve the accuracy.

Ensemble Learning Technique: Ensemble learning is a machine learning technique that combines the predictions from multiple models to create a more accurate and stable prediction. It is an approach that leverages the collective intelligence of multiple models to improve the overall performance of the learning system.

Types of Ensemble Learning:

1) Bagging: The models are trained in the randomly selected datasets and then combined by averaging the models.
2) Boosting:This method involves on rectifying the previously made error by the previous model , which results in the betterment of the new model.

The random forest regression Model Prediction Values:

```
RandomForest MSE: 14465132338.701965
Predicted Price for the first test sample using RandomForest: 1318734.8938716897
```

The XG boost regression Model Prediction Values:

```
XGBoost MSE: 14912750470.898375
Predicted Price for the first test sample using XGBoost: 1297134.375
```

The LightGBM regression Model Prediction Values:

```
LightGBM MSE: 12313469588.940966
Predicted Price for the first test sample using LightGBM: 1332323.9035836137
```