Predict the price of Airbnb listings in NYC.

to predict the price of a listing based on its location, minimum nights, number of reviews, reviews per month, calculated host listings count, and availability.

The dataset is a CSV file containing information about Airbnb listings in NYC, such as the price, location, availability, number of reviews, and host information.

The data cleaning and preparation part of the code includes removing duplicate entries and irrelevant columns, handling missing values, and converting data types. With visualization using matplotlib and seaborn libraries to show the distribution of prices and the average price per neighbourhood group.

It visualizes the price distribution, price vs. availability, and average price by neighbourhood group. It also trains and evaluates two regression models (Decision Tree and Random Forest) for predicting listing prices.

Model trains and evaluates two machine learning models: Decision Tree Regression and Random Forest Regression. The code splits the dataset into training and testing sets, defines the input and output variables, and fits the models using the training set. It then uses the models to predict the prices of the Airbnb listings in the testing set and calculates the mean squared error of the predictions.

Finally, the code visualizes the results of the models by creating a scatterplot of the actual prices vs. predicted prices.

The predictive model uses decision tree regression and random forest regression to predict the price of a listing based on its location, minimum nights, number of reviews, reviews per month, calculated host listings count, and availability. Conducted exploratory data analysis (EDA) and build a predictive model using machine learning techniques on Airbnb data in New York City.