

# **XGBoost Home Price Prediction code**

## **# Importing necessary libraries**

```
import pandas as pd  
import numpy as np  
from sklearn.model_selection import train_test_split  
from sklearn.metrics import mean_squared_error  
import xgboost as xgb
```

## **# Load the dataset**

```
data = pd.read_csv('home_prices_dataset.csv')
```

## **# Split the data into features and target variable**

```
X = data.drop('Price', axis=1)  
y = data['Price']
```

## **# Split the data into training and testing sets**

```
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
```

## **# Train the XGBoost model**

```
model = xgb.XGBRegressor(objective='reg:squarederror',  
                           colsample_bytree=0.3,  
                           learning_rate=0.1,  
                           max_depth=5,  
                           alpha=10,  
                           n_estimators=100)  
model.fit(X_train, y_train)
```

## **# Predict the test set**

```
y_pred = model.predict(X_test)
```

```
# Calculate the mean squared error
```

```
mse = mean_squared_error(y_test, y_pred)
```

```
print("Mean Squared Error:", mse)
```