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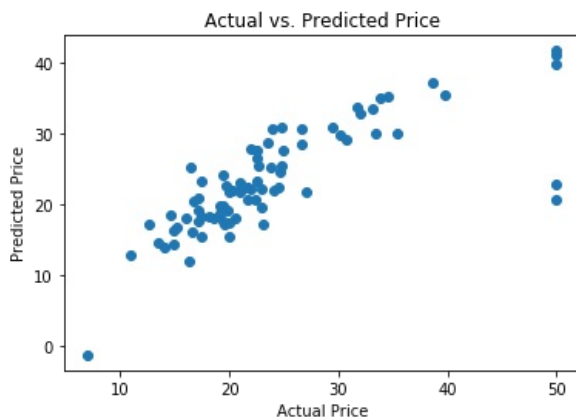
In [2]: import pandas as pd
import numpy as np
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error, r2_score
from sklearn.preprocessing import StandardScaler
import matplotlib.pyplot as plt
housing_data = pd.read_csv('HousingData.csv')
print(housing_data.isnull().sum())
housing_data = housing_data.dropna()
features = ['RM', 'NOX', 'DIS', 'RAD', 'TAX', 'PTRATIO', 'B', 'LSTAT']
X = housing_data[features]
y = housing_data['MEDV']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
scaler = StandardScaler()
X_train = scaler.fit_transform(X_train)
X_test = scaler.transform(X_test)
model = LinearRegression()
model.fit(X_train, y_train)
y_pred = model.predict(X_test)
rmse = np.sqrt(mean_squared_error(y_test, y_pred))
r2 = r2_score(y_test, y_pred)
print(f"RMSE: {rmse:.2f}")
print(f"R²: {r2:.2f}")
plt.scatter(y_test, y_pred)
plt.xlabel('Actual Price')
plt.ylabel('Predicted Price')
plt.title('Actual vs. Predicted Price')
plt.show()

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CRIM      20
ZN        20
INDUS     20
CHAS      20
NOX        0
RM         0
AGE       20
DIS        0
RAD        0
TAX        0
PTRATIO    0
B          0
LSTAT     20
MEDV       0
dtype: int64
RMSE: 5.75
R²: 0.61

```



In [ ]: