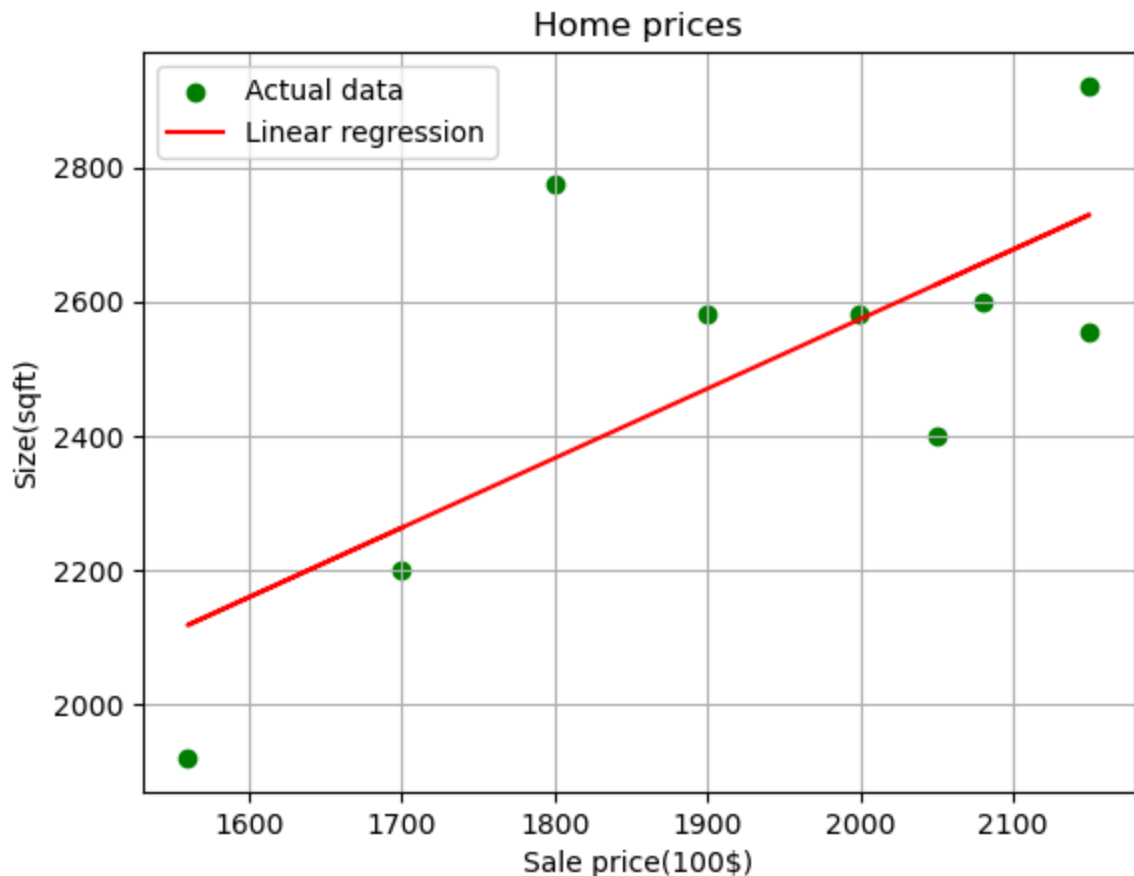


```

In [4]: import numpy as np
from scipy.stats import linregress
from sklearn.metrics import mean_absolute_error, mean_squared_error
import matplotlib.pyplot as plt
# Provided dataset
X = np.array([2050, 2080, 2150, 2150, 1999, 1900, 1800, 1560, 1700]) # Sale price
y = np.array([2400, 2600, 2554, 2921, 2580, 2580, 2774, 1920, 2200]) # Size(sqft)
slope, intercept, r_value, p_value, std_err = linregress(X, y)
y_pred = intercept + slope * X
plt.scatter(X, y, color='green', label='Actual data')
plt.plot(X, y_pred, color='red', label='Linear regression')
plt.xlabel('Sale price(100$)')
plt.ylabel('Size(sqft)')
plt.title('Home prices')
plt.legend()
plt.grid(True)
plt.show()
MeanAbsoluteError = mean_absolute_error(y, y_pred)
MeanSquaredError = mean_squared_error(y, y_pred)
RootMeanSquaredError = np.sqrt(mse)
print("Mean Absolute Error (MAE):", MeanAbsoluteError)
print("Mean Squared Error (MSE):", MeanSquaredError)
print("Root Mean Squared Error (RMSE):", RootMeanSquaredError)
print("Intercept:", intercept)
print("Slope (Coefficient):", slope)

```



Mean Absolute Error (MAE): 159.37650114037217
Mean Squared Error (MSE): 38092.22590654273
Root Mean Squared Error (RMSE): 195.17229799985122
Intercept: 501.2137350089333
Slope (Coefficient): 1.0361766855437116

In []: