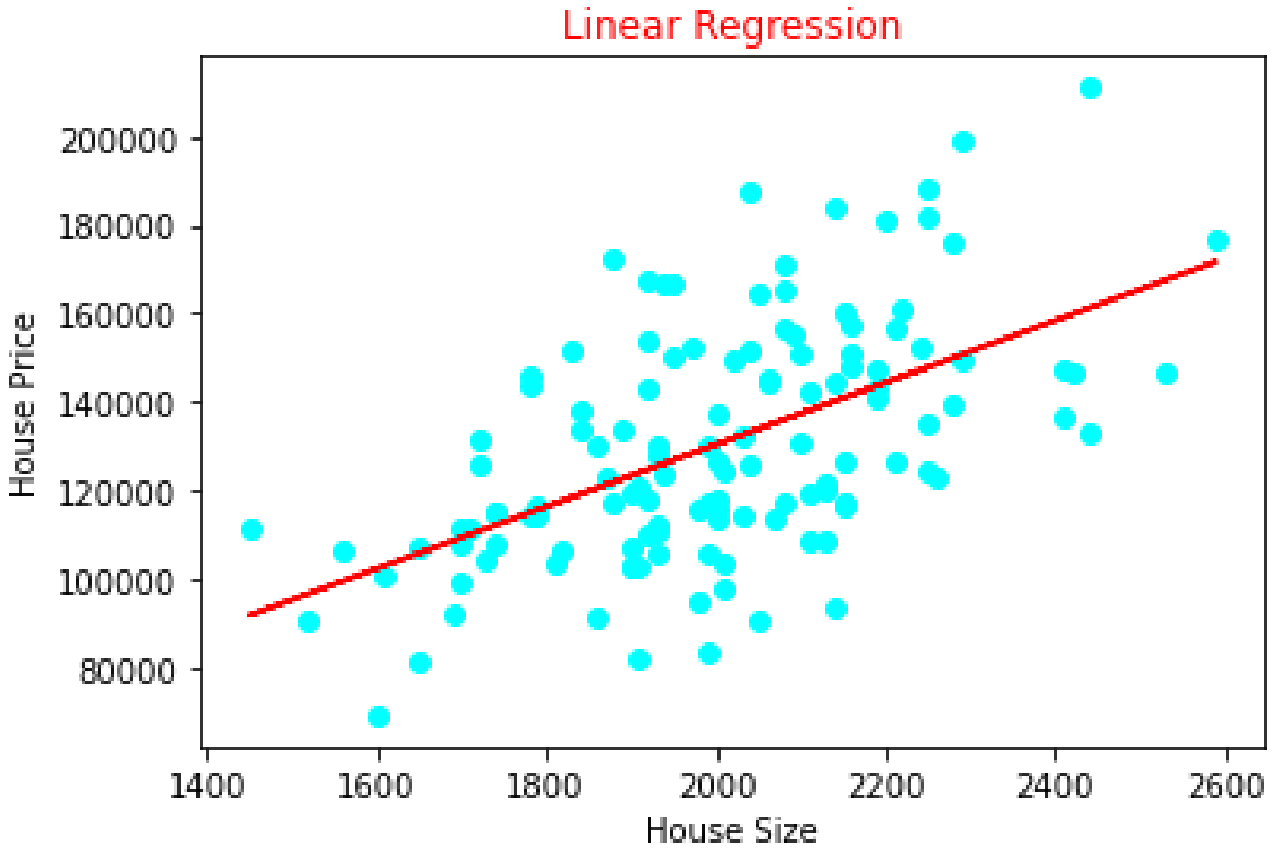
LINEAR REGRESSION BEST FIT LINE

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error
import math
# load dataset
dataset = pd.read_csv('House_Prices1.csv')
pd.set_option('display.max_rows',None)
dataset
# Single Feature Variable - Size of the Houses
size_data = dataset['SqFt']
# Target/Dependent Variable - Price of the Houses
price_data = dataset['Price']
size = np.array(size_data).reshape(-1,1)
price = np.array(price_data).reshape(-1,1)
# Train the Model
model = LinearRegression()
model.fit(size,price)
# Predict Price
price_predicted=model.predict(size)
# Plot the result
plt.scatter(size,price, color="cyan")
plt.plot(size,price_predicted, color="red")
plt.title("Linear Regression",color="red")
plt.xlabel("House Size")
plt.ylabel("House Price")
plt.show()
```

OUTPUT


Linear Regression
House Price
200000
180000
160000
140000
120000
100000
80000
1400
1600
1800
2000
2200
2400
2600
House Size