OLS Regression Results

Dep. Variable:	price	R-squared:	0.531
Model:	OLS	Adj. R-squared:	0.530
Method:	Least Squares	F-statistic:	917.9
Date:	Thu, 13 Feb 2025	Prob (F-statistic):	1.88e-135
Time:	11:40:44	Log-Likelihood:	-10351.
No. Observations:	813	AIC:	2.071e+04
Df Residuals:	811	BIC:	2.072e+04
Df Model:	1		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
Intercept	1.62e+04	7611.940	2.128	0.034	1254.119	3.11e+04
sq__ft	134.6408	4.444	30.297	0.000	125.918	143.364

Omnibus:	305.482	Durbin-Watson:	1.939
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1623.560
Skew:	1.628	Prob(JB):	0.00
Kurtosis:	9.109	Cond. No.	4.53e+03

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 4.53e+03. This might indicate that there are strong multicollinearity or other numerical problems.

β_0

β_1

$SE_{\beta 0}$

$SE_{\beta 1}$

t- values

p-values

Regression line:

$\hat{y} = \beta_0 + \beta_1(x)$ → price = 16,200 + 134.6408(square ft)

if H_0 $\beta = 0$ and H_1 $\beta \neq 0$

intercept $t = (\beta_0 - 0) / SE_{\beta 0}$

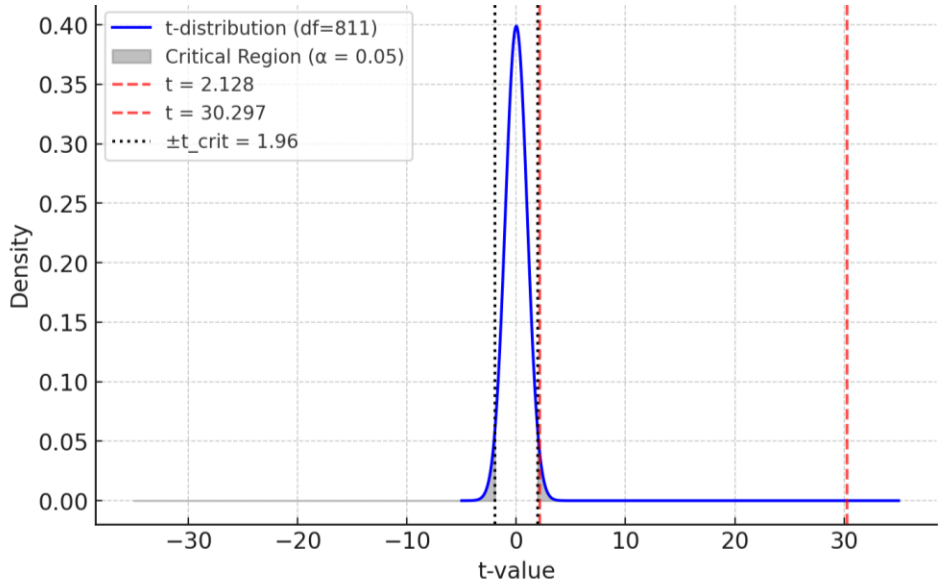
$t = (16{,}200 - 0) / 7611.940$

t = 2.128

square ft $t = (\beta_1 - 0) / SE_{\beta 1}$

$t = (134.6408 - 0) / 4.444$

t = 30.297



If **t-value** is greater than the **t critical**, **p-value** will be < 0.05