

Data

Classification Output

Variable Name	Description
age	The age of a home in years.
home_sqft	The size of a home's floor plan in square feet.
lot_sqft	The size of a home's lot in square feet.
stories	The number of floors in a home.
rooms	The number of rooms in a home.
grocery	The distance of a home from its nearest grocery store in miles.
school	The quality rating (%) of the closest school to a home.
crime	The crime rating (%) of the home's neighborhood.
gated	Indicates if the home's neighborhood is gated.
location	The type of area where the home is located.
urban	Indicates if the home is within city limits.
suburban	Indicates if the home is within the suburbs.
rural	Indicates if the home is in the country / within the outskirts of the city.
value	The value of the home in thousands of dollars.
renovated	Indicates if the home has been renovated.

home	age	home_sqft	lot_sqft	stories	rooms	grocery	school	crime	gated	location	urban	suburban	rural	value	renovated
1	15	2189	6733	2	4	4.79	78	3.70	1	suburban	0	1	0	322.59	0
2	33	1288	2935	2	2	2.35	88	4.40	1	urban	1	0	0	155.87	1
3	31	2250	7675	2	4	4.05	60	5.06	1	suburban	0	1	0	413.43	1
4	30	1881	7102	2	3	3.02	60	2.14	0	suburban	0	1	0	340.36	0
5	51	2155	7142	2	4	1.59	60	4.80	0	urban	1	0	0	472.13	1
6	21	1810	6883	1	3	3.48	76	4.70	0	rural	0	0	1	234.69	0
7	30	1885	6374	1	3	1.99	78	3.72	0	suburban	0	1	0	299.15	0
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
73	17	1862	6501	2	3	2.74	44	5.64	1	rural	0	0	1	205.96	0
74	45	1872	6387	2	3	4.49	100	4.17	0	urban	1	0	0	461.84	1
75	24	1690	6571	1	3	4.30	60	3.04	1	urban	1	0	0	419.42	0
76	14	2386	8569	1	4	4.36	78	3.89	1	urban	1	0	0	589.25	1
77	35	1707	6302	1	3	3.38	54	4.31	0	urban	1	0	0	425.25	1
78	58	1907	6547	2	3	4.23	82	3.63	0	suburban	0	1	0	444.63	1
79	34	1931	7151	1	3	4.54	64	3.89	0	urban	1	0	0	474.20	1
80	59	1729	6308	1	3	4.51	32	4.35	0	suburban	0	1	0	284.52	0

Descriptive Statistics						
Variable Name	Mean	Std. Dev	Sum	Median	Minimum	Maximum
age	34.26	13.976	2741.00	34.00	3.00	65.00
home_sqft	1980.28	449.703	158422.00	1900.50	1109.00	2927.00
lot_sqft	6520.24	1848.169	521619.00	6447.50	2494.00	10998.00
stories	1.59	0.520	127.00	2.00	1.00	3.00
rooms	3.46	0.927	277.00	3.00	2.00	5.00
grocery	3.93	1.324	314.11	3.72	1.06	6.76
school	65.53	16.358	5242.00	63.00	32.00	100.00
crime	3.54	1.047	283.26	3.49	1.29	5.66
gated	0.24	0.428	19.00	0.00	0.00	1.00
urban	0.58	0.497	46.00	1.00	0.00	1.00
suburban	0.26	0.443	21.00	0.00	0.00	1.00
rural	0.16	0.371	13.00	0.00	0.00	1.00
value	377.48	135.836	30198.01	358.93	102.66	707.62
renovated	0.35	0.480	28.00	0.00	0.00	1.00

Classification Table

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Observation Number	Actual Class	Probability of Class 1	Observation Number	Actual Class	Probability of Class 1
1	1	1.0000	41	0	0.3657
2	1	0.9931	42	0	0.3635
3	1	0.9772	43	0	0.3418
4	0	0.9505	44	0	0.3405
5	1	0.9394	45	0	0.3365
6	1	0.9096	46	0	0.3246
7	1	0.8950	47	0	0.3144
8	1	0.8764	48	1	0.3115
9	0	0.8355	49	0	0.2925
10	0	0.8160	50	0	0.2796
11	1	0.7817	51	0	0.2774
12	1	0.7650	52	0	0.2730
13	1	0.7562	53	0	0.2649
14	1	0.7441	54	0	0.2618
15	1	0.7184	55	0	0.2550
16	1	0.6667	56	0	0.2401
17	1	0.6293	57	0	0.2350
18	1	0.6234	58	0	0.2093
19	0	0.6226	59	0	0.2000
20	0	0.6010	60	0	0.1992
21	0	0.5980	61	0	0.1948
22	1	0.5878	62	0	0.1867
23	1	0.5814	63	0	0.1740
24	1	0.5766	64	1	0.1675
25	0	0.5743	65	0	0.1657
26	1	0.5736	66	0	0.1562
27	1	0.5729	67	0	0.1534
28	1	0.5642	68	0	0.1399
29	0	0.5430	69	0	0.1126
30	1	0.5287	70	0	0.1103
31	1	0.5226	71	1	0.1091
32	0	0.5102	72	0	0.1065
33	1	0.5083	73	0	0.0971
34	0	0.4762	74	0	0.0931
35	1	0.4752	75	0	0.0873
36	0	0.4512	76	0	0.0782
37	0	0.4409	77	0	0.0677
38	0	0.4321	78	0	0.0544
39	0	0.4292	79	0	0.0381
40	0	0.3708	80	0	0.0054

Logistic Regression Output

Classification Output

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-5.6947	2.0050	-2.8403	0.0045	-9.6244	-1.7649	0.0034
lot_sqft	0.0003	0.0002	2.2456	0.0247	0.0000	0.0006	1.0003
grocery	0.1131	0.2066	0.5475	0.5841	-0.2918	0.5179	1.1197
school	0.0120	0.0168	0.7109	0.4772	-0.0210	0.0450	1.0120
urban	2.3806	0.6549	3.6348	0.0003	1.0969	3.6643	10.8110

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-0.6450	0.3064	-2.1051	0.0353	-1.2455	-0.0445	0.5247
gated	1.3969	0.5835	2.3942	0.0167	0.2533	2.5405	4.0427
suburban	-1.6131	0.7096	-2.2732	0.0230	-3.0040	-0.2222	0.1993

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-2.6938	1.0084	-2.6714	0.0076	-4.6702	-0.7174	0.0676
lot_sqft	0.0004	0.0001	2.3862	0.0170	0.0001	0.0006	1.0004
rural	-2.5287	1.1032	-2.2921	0.0219	-4.6910	-0.3664	0.0798

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-3.4818	1.5423	-2.2575	0.0240	-6.5047	-0.4589	0.0308
age	0.0196	0.0185	1.0582	0.2900	-0.0167	0.0559	1.0198
lot_sqft	0.0003	0.0001	1.9308	0.0535	0.0000	0.0006	1.0003
stories	-0.0017	0.4883	-0.0034	0.9973	-0.9588	0.9555	0.9983
gated	1.3041	0.5744	2.2705	0.0232	0.1784	2.4298	3.6843

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-6.4338	1.7068	-3.7695	0.0002	-9.7791	-3.0885	0.0016
crime	1.0453	0.3475	3.0079	0.0026	0.3642	1.7264	2.8441
urban	2.9982	0.7955	3.7691	0.0002	1.4391	4.5573	20.0496

<i>Regression Coefficients</i>	Coefficient	Standard Error	Wald Value	p-Value	Lower Limit	Upper Limit	Exp(Coef)
Constant	-4.9656	1.9709	-2.5195	0.0118	-8.8286	-1.1027	0.0070
age	0.0187	0.0180	1.0373	0.2996	-0.0166	0.0540	1.0189
home_sqft	0.0006	0.0006	1.1110	0.2666	-0.0005	0.0018	1.0006
school	0.0102	0.0151	0.6752	0.4995	-0.0194	0.0399	1.0103
crime	0.4822	0.2440	1.9763	0.0481	0.0040	0.9604	1.6196

Age	Home Sqft	Age - Standardized	Home Sqft - Standardized	Standardized Distance from (38, 1621)	True Renovation Status
12	2721	-1.560	2.287	3.449	No
5	2398	-2.063	1.435	3.132	Yes
39	2653	0.377	2.108	2.722	No
15	2189	-1.345	0.884	2.229	No
15	2125	-1.345	0.715	2.119	No
65	1516	2.243	-0.890	1.958	Yes
38	2350	0.306	1.309	1.922	Yes
16	1315	-1.273	-1.420	1.773	Yes
24	2174	-0.699	0.845	1.771	Yes
29	2165	-0.340	0.821	1.573	No
53	2028	1.382	0.460	1.520	No
34	2152	0.019	0.787	1.429	No
54	1870	1.454	0.043	1.323	No
21	1810	-0.915	-0.115	1.318	No
20	1535	-0.986	-0.840	1.312	No
33	1224	-0.053	-1.660	1.107	No
52	1560	1.310	-0.774	1.018	No
51	1488	1.239	-0.964	0.997	No
46	1901	0.880	0.125	0.935	Yes
35	1286	0.090	-1.497	0.909	No
30	1885	-0.269	0.083	0.902	No
30	1881	-0.269	0.072	0.894	No
45	1872	0.808	0.048	0.831	Yes
47	1795	0.952	-0.155	0.792	No
34	1896	0.019	0.112	0.780	Yes
28	1548	-0.412	-0.806	0.743	No
28	1604	-0.412	-0.658	0.719	No
38	1425	0.306	-1.130	0.517	Yes
33	1731	-0.053	-0.324	0.461	Yes
38	1747	0.306	-0.281	0.332	No
38	1621	0.306	-0.614	0.000	Unknown

Age	Lot Sqft	Age - Standardized	Lot Sqft - Standardized	Standardized Distance from (38, 5287)	True Renovation Status
12	9549	-1.560	2.179	3.207	No
5	7212	-2.063	0.748	2.645	Yes
39	8898	0.377	1.780	2.211	No
15	7569	-1.345	0.967	2.162	No
65	5374	2.243	-0.377	1.939	Yes
15	6733	-1.345	0.455	1.873	No
24	7807	-0.699	1.112	1.841	Yes
16	4012	-1.273	-1.211	1.761	Yes
34	7988	0.019	1.223	1.678	No
20	3553	-0.986	-1.492	1.672	No
38	7975	0.306	1.215	1.645	Yes
29	7697	-0.340	1.045	1.610	No
21	6883	-0.915	0.547	1.563	No
52	3746	1.310	-1.373	1.378	No
35	3068	0.090	-1.788	1.375	No
30	7102	-0.269	0.681	1.251	No
33	3424	-0.053	-1.570	1.195	No
54	5644	1.454	-0.212	1.169	No
53	6013	1.382	0.014	1.165	No
51	5082	1.239	-0.556	0.941	No
30	6374	-0.269	0.235	0.879	No
28	4463	-0.412	-0.935	0.877	No
45	6387	0.808	0.243	0.840	Yes
28	5153	-0.412	-0.512	0.722	No
47	4820	0.952	-0.716	0.706	No
34	6318	0.019	0.201	0.693	Yes
46	5704	0.880	-0.175	0.628	Yes
33	5215	-0.053	-0.474	0.362	Yes
38	5340	0.306	-0.398	0.032	Yes
38	5293	0.306	-0.426	0.004	No
38	5287	0.306	-0.430	0.000	Unknown

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Classification Output

Home Sqft	Lot Sqft	Home Sqft - Standardized	Lot Sqft - Standardized	Standardized Distance from (1621, 5287)	True Renovation Status
2721	9549	2.287	2.179	3.901	No
2653	8898	2.108	1.780	3.506	No
2350	7975	1.309	1.215	2.530	Yes
2398	7212	1.435	0.748	2.363	Yes
2152	7988	0.787	1.223	2.166	No
2174	7807	0.845	1.112	2.123	Yes
2165	7697	0.821	1.045	2.058	No
2125	7569	0.715	0.967	1.928	No
2189	6733	0.884	0.455	1.740	No
1286	3068	-1.497	-1.788	1.620	No
1224	3424	-1.660	-1.570	1.548	No
1881	7102	0.072	0.681	1.305	No
2028	6013	0.460	0.014	1.162	No
1315	4012	-1.420	-1.211	1.123	Yes
1810	6883	-0.115	0.547	1.097	No
1535	3553	-0.840	-1.492	1.085	No
1885	6374	0.083	0.235	0.963	No
1896	6318	0.112	0.201	0.961	Yes
1560	3746	-0.774	-1.373	0.957	No
1872	6387	0.048	0.243	0.944	Yes
1901	5704	0.125	-0.175	0.781	Yes
1870	5644	0.043	-0.212	0.692	No
1795	4820	-0.155	-0.716	0.541	No
1425	5340	-1.130	-0.398	0.518	Yes
1604	4463	-0.658	-0.935	0.506	No
1488	5082	-0.964	-0.556	0.372	No
1747	5293	-0.281	-0.426	0.332	No
1731	5215	-0.324	-0.474	0.293	Yes
1516	5374	-0.890	-0.377	0.282	Yes
1548	5153	-0.806	-0.512	0.209	No
1621	5287	-0.614	-0.430	0.000	Unknown