

How does preference for residing along Charles River influences Boston housing prices

Jiayi Zheng

04/20/2022

Abstract

This paper revisits the 1978 Boston housing market data used in (David Harrison Jr 1978a). The paper first explores the relationship of Boston housing prices with many other variables, such as per capita crime rate by town, average number of rooms per dwelling, lower status of the population, etc., with emphasis on showing people's preference for residing along river tract. Then, the paper builds a suitable Boston housing price prediction model using suitable predictors based on analysis results.

Website for github¹

1 Introduction

Residing along river tracts offers many benefits. One could easily go out for a jogging with the company of pleasant river sounds. However, expressing the effect of residing along river tracts in monetary terms is not so easy, although it is generally expected that such effect has to be a positive one. One of the reasons for this is that specifying the functional form of the relationship between house prices and whether a house is located along a river tract can be hard. The common assumption of a linear relationship may cause a over-fitting problem, should the actual relationship is seriously non-linear. This paper attempts to solve the concern over function form specification by using machine learning, specifically, LASSO regression technique, and compare its performance with Linear regression model on the basis of root-mean-square error (RMSE).

This paper first explores the relationship of Boston housing prices with many other variables, such as per capita crime rate by town, average number of rooms per dwelling, lower status of the population, etc., with emphasis on showing people's preference for residing along river tract. Then, the paper builds a suitable Boston housing price prediction model using suitable predictors based on analysis results.

2 Data

The data is analysis and cleaned in R (R Core Team 2021) using readxl (Wickham and Bryan 2019), jenitor (Firke 2021), the tidyverse (Wickham et al. 2019), and dplyr packages (Wickham et al. 2021) in the Rstudio. The paper is knitted in Rmarkdown.

2.1 Data source

The data is downloaded from (David Harrison Jr 1978b). The data comes from (David Harrison Jr 1978a).

¹<https://github.com/wholesomefcas/BostonHousing>

2.2 Data overview and cleaning

There are 508 observations for 14 variables. There are no missing values in this data set. The first 22 lines are removed, because those lines only contain explanatory notes but no actual data.

The variables in order are (David Harrison Jr 1978b):

CRIM: per capita crime rate by town.

ZN: proportion of residential land zoned for lots over 25,000 sq.ft

INDUS: proportion of non-retail business acres per town

CHAS: Charles River dummy variable (= 1 if tract bounds river; 0 otherwise)

NOX: nitric oxides concentration (parts per 10 million)

RM: average number of rooms per dwelling

AGE: proportion of owner-occupied units built prior to 1940

DIS: weighted distances to five Boston employment centres

RAD: index of accessibility to radial highways

TAX: full-value property-tax rate per \$10,000

PTRATIO: pupil-teacher ratio by town

B: $1000(\text{Bk} - 0.63)^2$ where Bk is the proportion of blacks by town

LSTAT: % lower status of the population

MEDV: Median value of owner-occupied homes in \$1000's

2.3 Data summary

Table 1: Boston Housing Data Descriptive Statistics Table Part 1

CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
Min. : 0.00632	Min. : 0.00	Min. : 0.46	Min. : :0.00000	Min. : :0.3850	Min. :3.561	Min. : 2.90
1st Qu.: 0.08205	1st Qu.: 0.00	1st Qu.: 5.19	1st Qu.:0.00000	1st Qu.:0.4490	1st Qu.:5.886	1st Qu.: 45.02
Median : 0.25651	Median : 0.00	Median : 9.69	Median :0.00000	Median :0.5380	Median :6.208	Median : 77.50
Mean : 3.61352	Mean : 11.36	Mean :11.14	Mean :0.06917	Mean :0.5547	Mean :6.285	Mean : 68.57
3rd Qu.: 3.67708	3rd Qu.: 12.50	3rd Qu.:18.10	3rd Qu.:0.00000	3rd Qu.:0.6240	3rd Qu.:6.623	3rd Qu.: 94.08
Max. :88.97620	Max. :100.00	Max. :27.74	Max. :1.00000	Max. :0.8710	Max. :8.780	Max. :100.00

Table 2: Boston Housing Data Descriptive Statistics Table Part 2

DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
Min. : 1.130	Min. : 1.000	Min. :187.0	Min. :12.60	Min. : 0.32	Min. : 1.73	Min. : 5.00
1st Qu.: 2.100	1st Qu.: 4.000	1st Qu.:279.0	1st Qu.:17.40	1st Qu.:375.38	1st Qu.: 6.95	1st Qu.:17.02

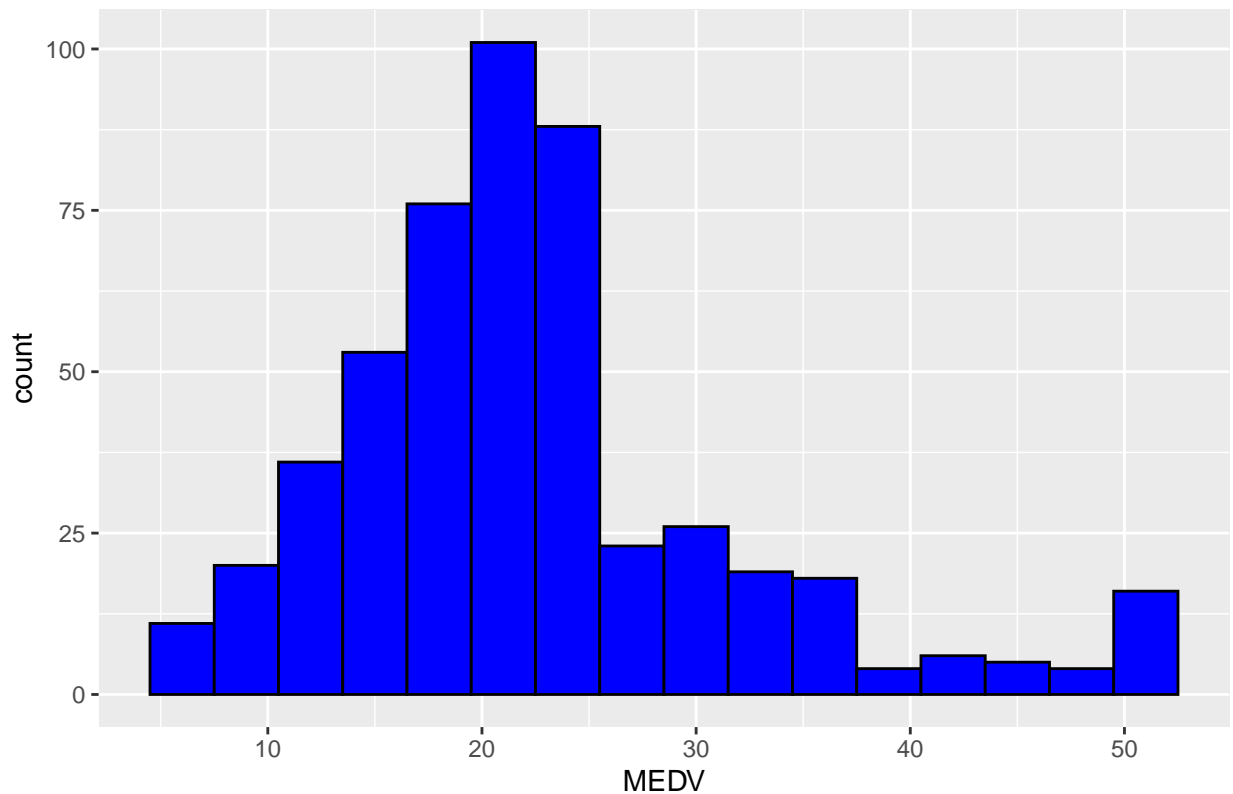
DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
Median :	Median :	Median	Median	Median	Median	Median
3.207	5.000	:330.0	:19.05	:391.44	:11.36	:21.20
Mean :	Mean :	Mean	Mean	Mean	Mean	Mean
3.795	9.549	:408.2	:18.46	:356.67	:12.65	:22.53
3rd Qu.:	3rd	3rd	3rd	3rd	3rd	3rd
5.188	Qu.:24.000	Qu.:666.0	Qu.:20.20	Qu.:396.23	Qu.:16.95	Qu.:25.00
Max.	Max.	Max.	Max.	Max.	Max.	Max.
:12.127	:24.000	:711.0	:22.00	:396.90	:37.97	:50.00

The summary of MEDV shows the minimum median value of owner-occupied homes is \$5k and the maximum median value of owner-occupied homes is \$50k. The median of MEDV is about \$21.2k.

3 Analysis

3.1 Distribution of the response variable MEDV

Figure 1: Histogram of MEDV



The dependent variable, MEDV, are a little skewed to the right. Because the skewness is not much, we do not need to do a transformation by Log to correct it.

3.2 Whether locating along Charles River (= 1 if tract bounds river; 0 otherwise)

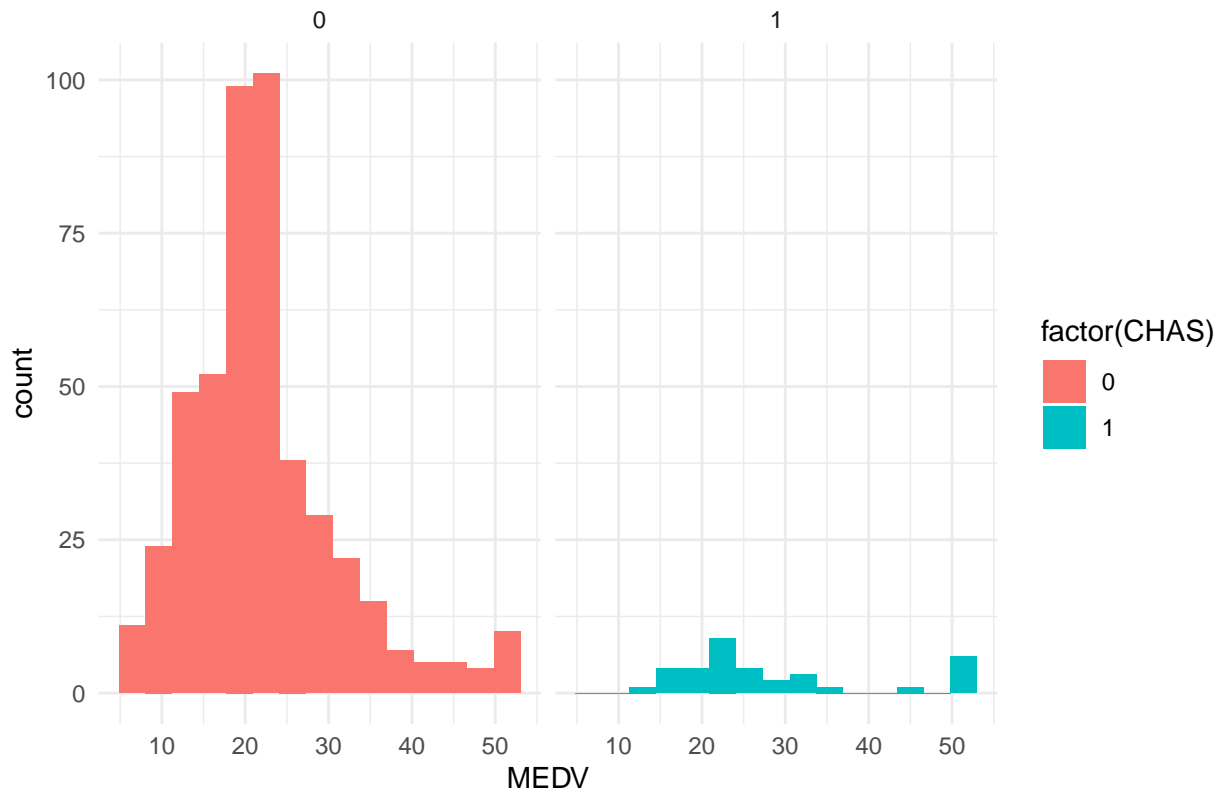
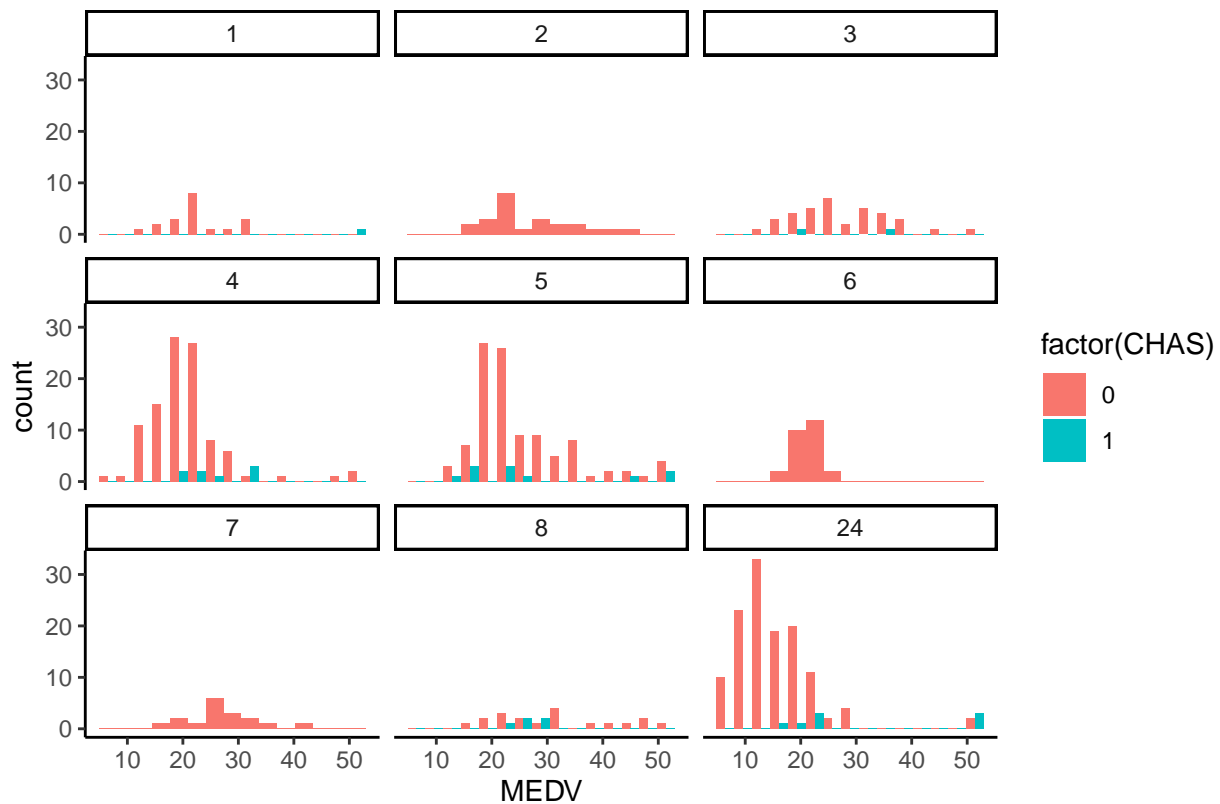


Figure 2: MEDV in different CHAS (CHAS = 1 if tract bounds river; 0 otherwise)

Grouping by whether locating along Charles River (= 1 if tract bounds river; 0 otherwise), it can be seen that most houses in our data does not locate along Charles River. For those that does not locate along Charles River, the distribution of MEDV is about symmetric. For those that does locate along Charles River, the distribution of MEDV is about uniform. The 2 ranges are similar.

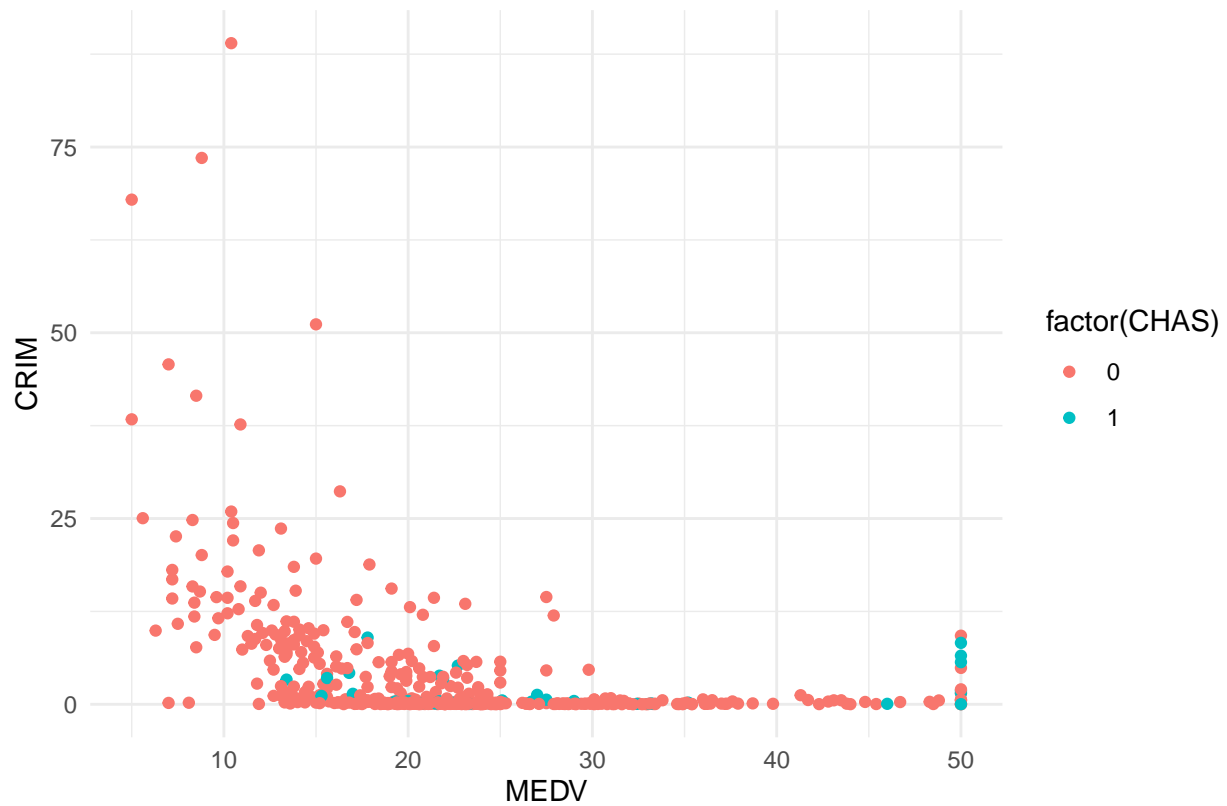
3.3 Accessibility to radial highways RAD



Median value of owner-occupied homes in \$1000's for different accessibility to radial highways

Grouping by accessibility to radial highways and indicated by whether locating along Charles River, it can be seen that most houses in our data has accessibility index 4, 5, or 24. For those that does not locate along Charles River, the distributions of MEDV are about symmetric for those with accessibility index 1, 3, 6, 7, or 8. For those that does not locate along Charles River, the distributions of MEDV are right-skewed for those with accessibility index 2, 4, 5, or 24. For those that does locate along Charles River, the distributions of MEDV are about uniform for different accessibility indexes. It seems that accessibility to radial highways does not influence the distribution of MEDV by much, whether houses are located along Charles River or not.

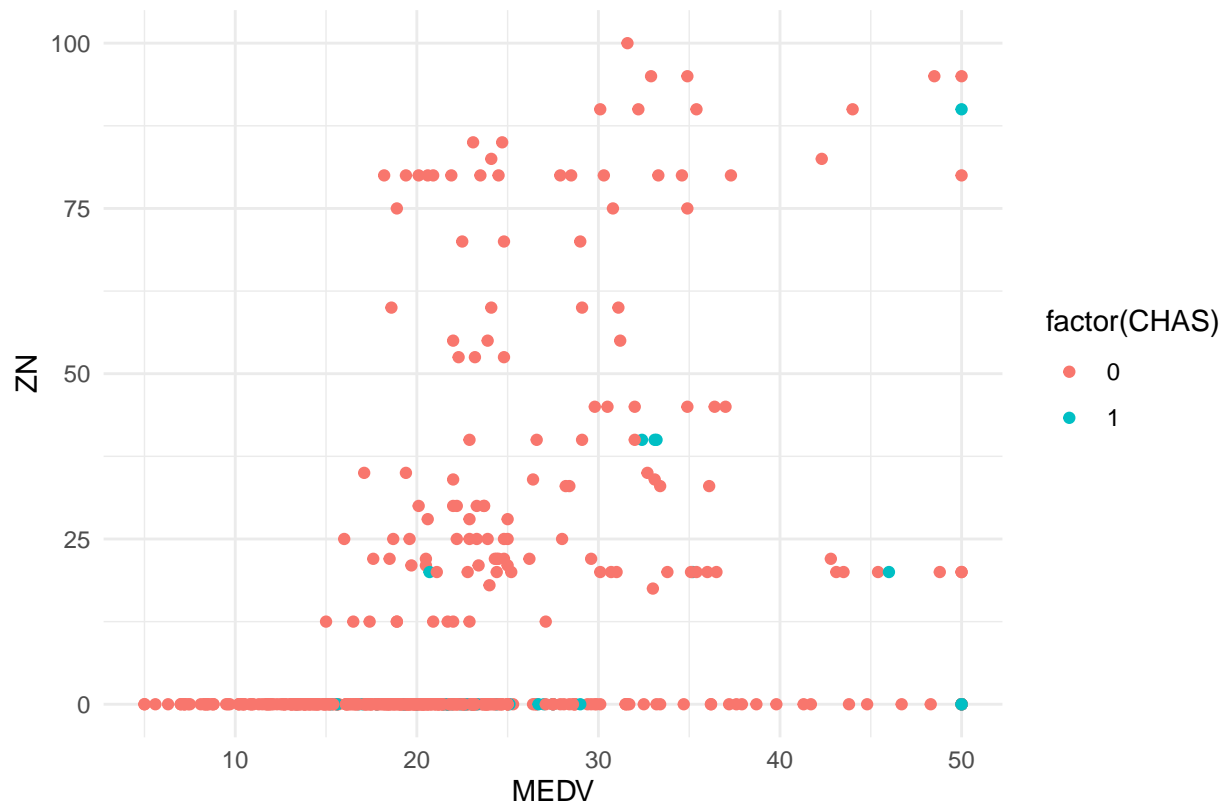
3.4 Per capita crime rate by town



: Median value of owner-occupied homes in \$1000's for different per capita crime rate by town

Plotting Per capita crime rate by town vs MEDV, grouped by whether locating along Charles River, it can be seen that higher crime rate decreases house prices, whether houses are located along Charles River or not.

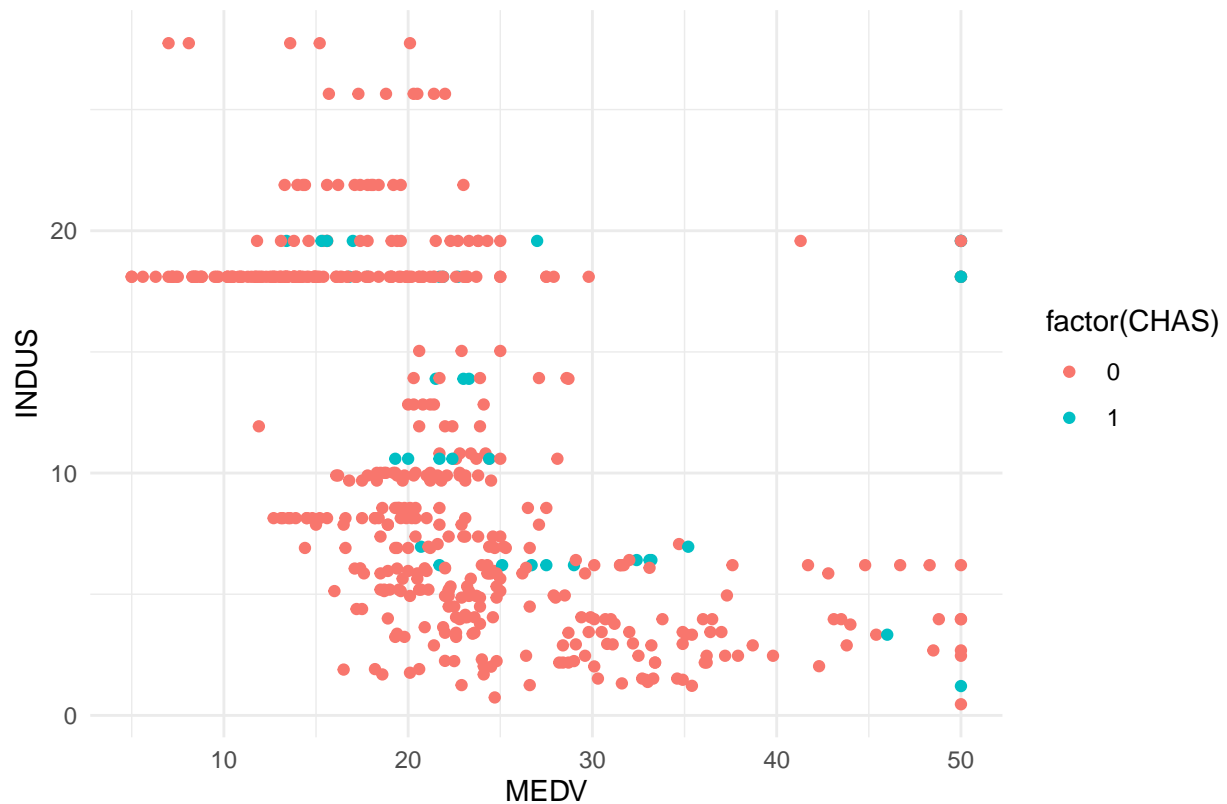
3.5 Proportion of residential land zoned for lots over 25,000 sq.ft.



Median value of owner-occupied homes for different proportion of residential land zoned for lots

Plotting Proportion of residential land zoned for lots over 25,000 sq.ft. vs MEDV, grouped by whether located along Charles River, it can be seen that higher Proportion of residential land zoned for lots increases house prices, whether houses are located along Charles River or not. However, for the same level of proportion of residential land zoned for lots, average MEDV seems to be always higher for houses located along Charles River.

3.6 Proportion of non-retail business acres per town



value of owner-occupied homes for different proportion of non-retail business acres per town

Plotting proportion of non-retail business acres per town vs **MEDV**, grouped by whether locating along Charles River, it can be seen that higher proportion of non-retail business acres per town decreases house prices, whether houses are located along Charles River or not. For the same level of proportion of non-retail business acres per town, average **MEDV** seems to be about the same for houses located along Charles River and for houses not located along Charles River.

3.7 Nitric oxides concentration (parts per 10 million)

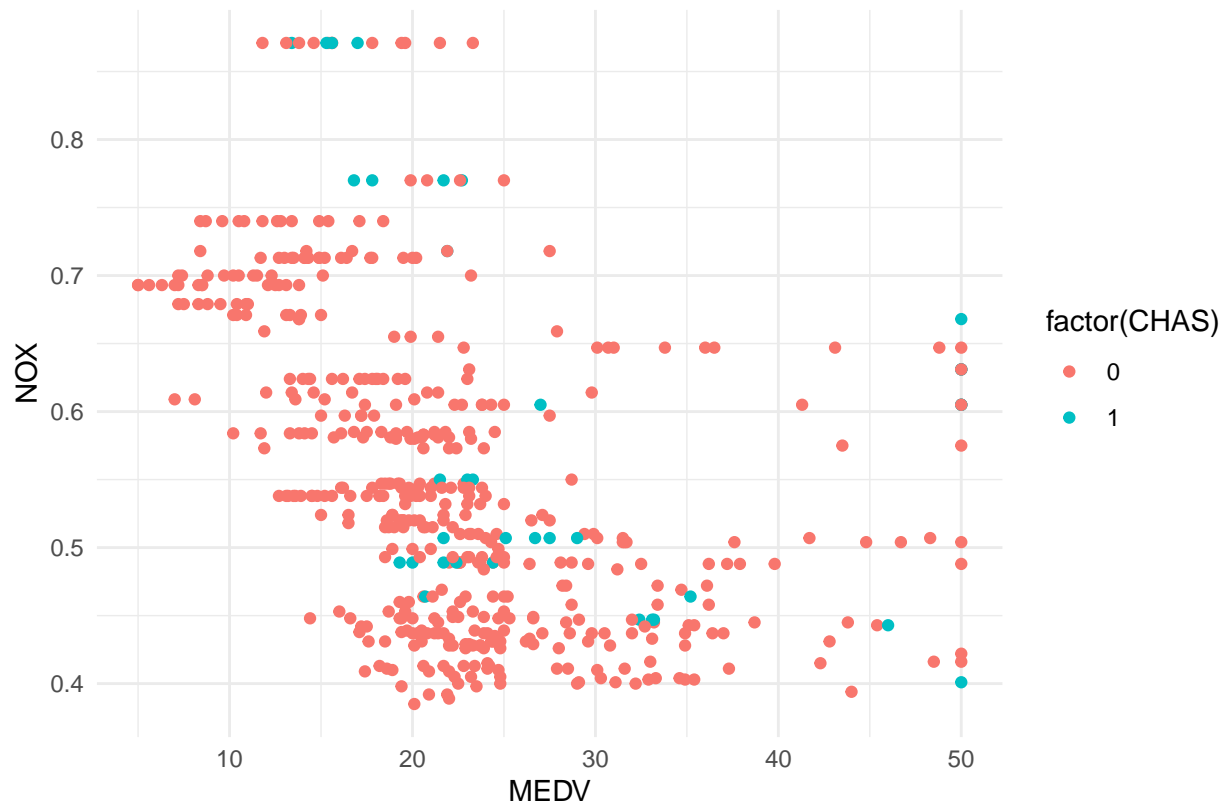
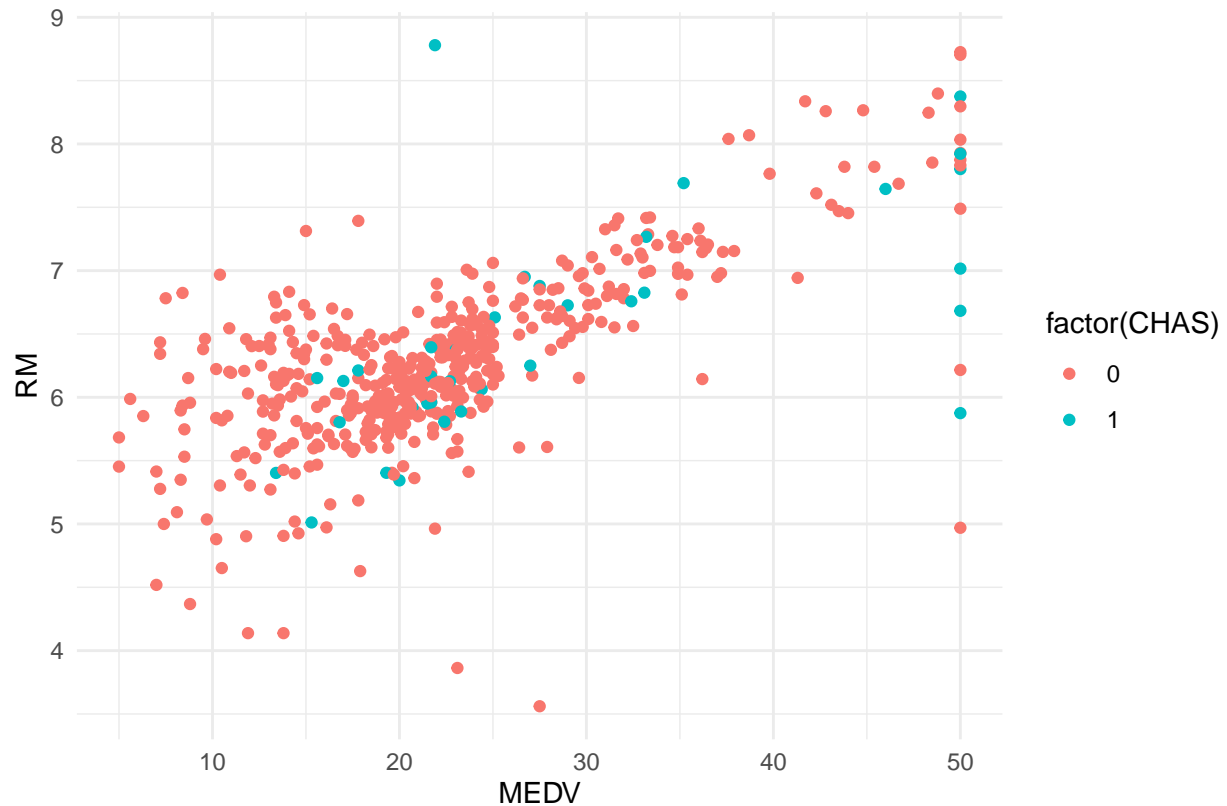


Figure 7: Median value of owner-occupied homes for different nitric oxides concentration

Plotting Nitric oxides concentration (parts per 10 million) vs MEDV, grouped by whether locating along Charles River, it can be seen that higher Nitric oxides concentration (parts per 10 million) decreases house prices, whether houses are located along Charles River or not. For the same level of Nitric oxides concentration (parts per 10 million), average MEDV seems to be about the same for houses located along Charles River and for houses not located along Charles River.

3.8 Average number of rooms per dwelling



8: Median value of owner-occupied homes for different average number of rooms per dwelling

Plotting average number of rooms per dwelling vs MEDV, grouped by whether locating along Charles River, it can be seen that higher average number of rooms per dwelling increases house prices in a near linear way, whether houses are located along Charles River or not. The positive linear relationship between average number of rooms per dwelling and MEDV seems to be the same for houses located along Charles River and for houses not located along Charles River.

3.9 Proportion of owner-occupied units built prior to 1940



e of owner-occupied homes for different proportion of owner-occupied units built prior to 1940

Plotting proportion of owner-occupied units built prior to 1940 vs MEDV, grouped by whether locating along Charles River, it can be seen that higher proportion of owner-occupied units built prior to 1940 decreases house prices, whether houses are located along Charles River or not. For the same level of proportion of owner-occupied units built prior to 1940, average MEDV seems to be higher for houses located along Charles River than for houses not located along Charles River.

3.10 Weighted distances to five Boston employment centres

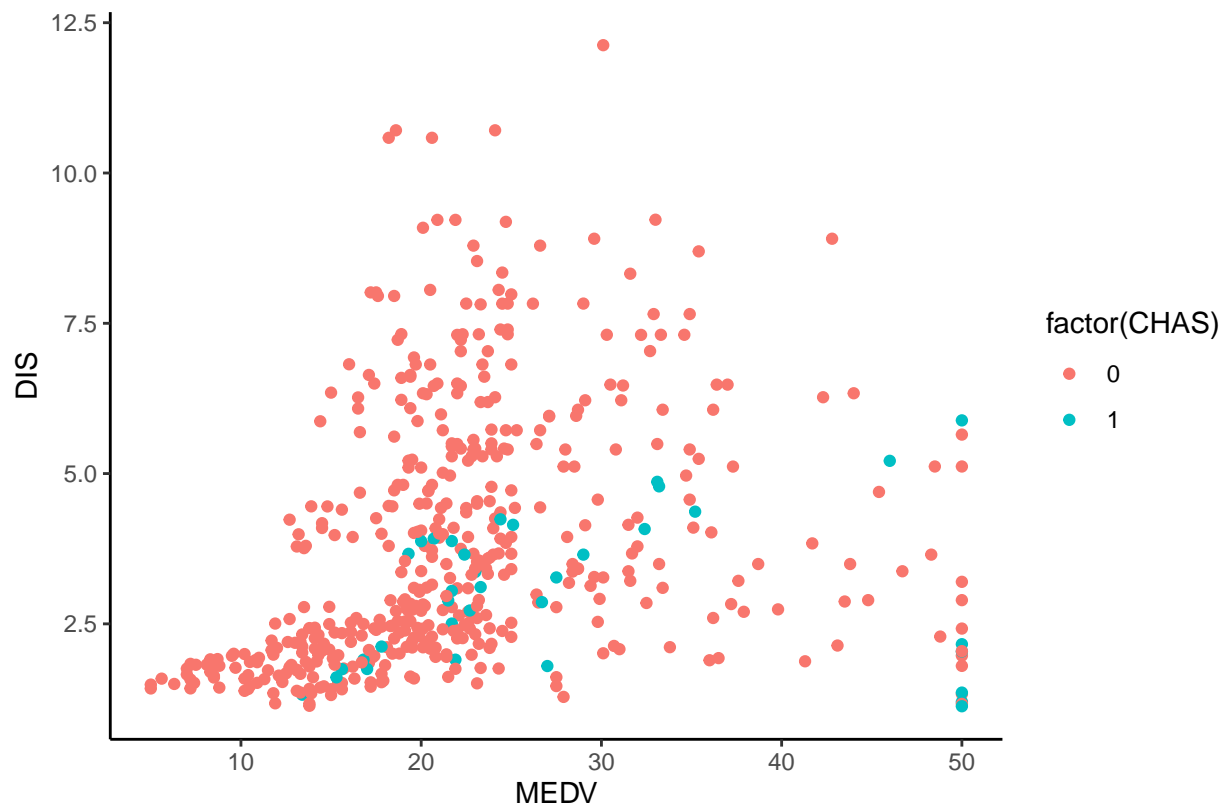


Figure 3.10: Weighted distances to five Boston employment centres vs MEDV, grouped by whether located along Charles River

Plotting weighted distances to five Boston employment centres vs MEDV, grouped by whether located along Charles River, it can be seen that higher weighted distances to five Boston employment centres increases house prices in a near linear way, whether houses are located along Charles River or not. The positive linear relationship between weighted distances to five Boston employment centres and MEDV seems to be the same for houses located along Charles River and for houses not located along Charles River.

3.11 Pupil-teacher ratio by town

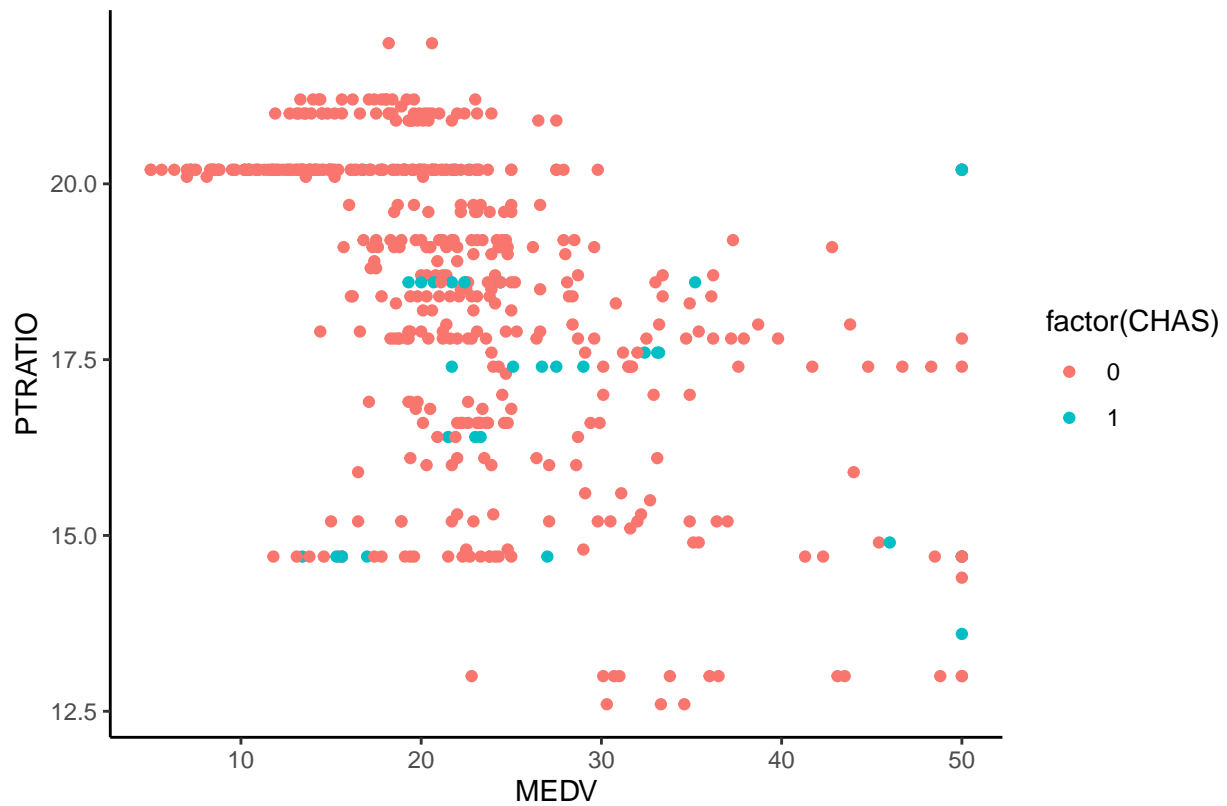


Figure 11: Median value of owner-occupied homes for different pupil-teacher ratio by town

Plotting pupil-teacher ratio by town vs MEDV, grouped by whether locating along Charles River, it can be seen that higher pupil-teacher ratio by town decreases house prices, whether houses are located along Charles River or not. For the same level of pupil-teacher ratio by town, average MEDV seems to be about the same for houses located along Charles River and for houses not located along Charles River.

3.12 Proportion of blacks by town

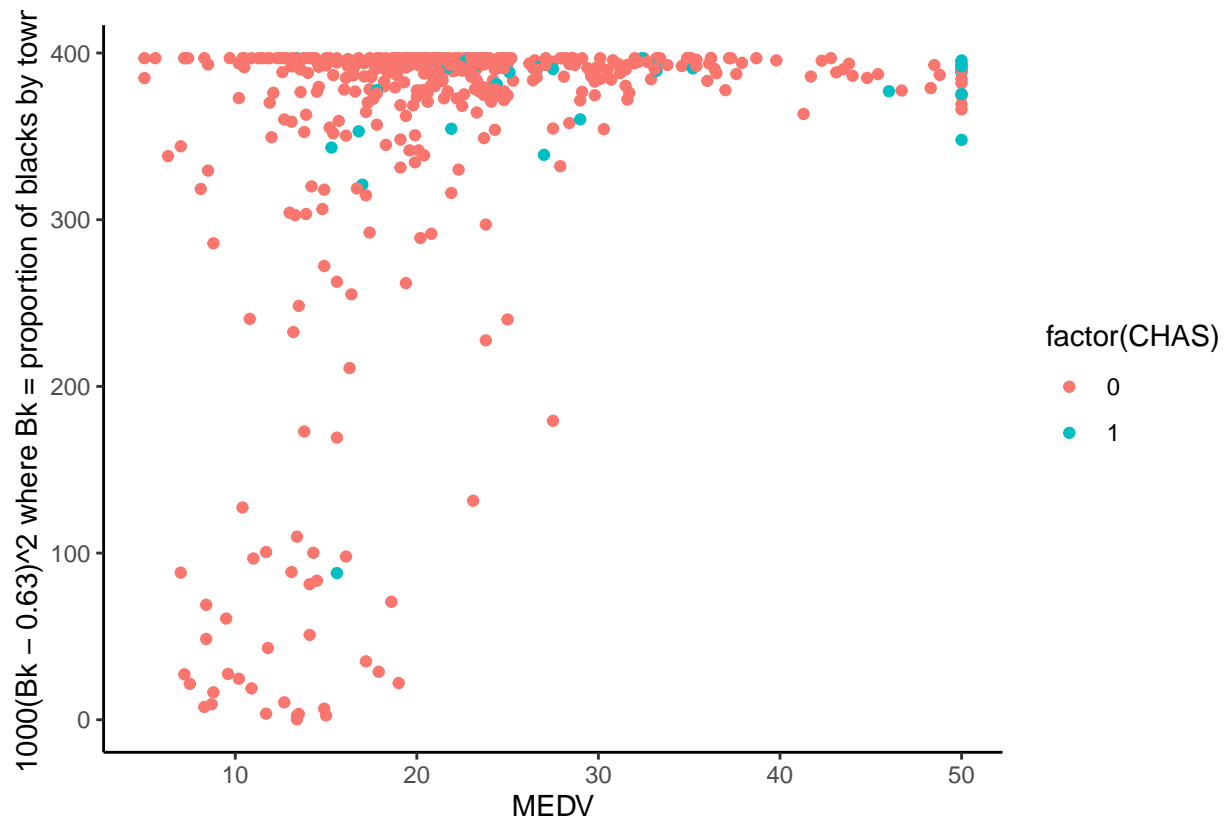


Figure 12: Median value of owner-occupied homes for different proportion of blacks by town

Plotting (transformed) proportion of blacks by town vs MEDV, grouped by whether locating along Charles River, no obvious pattern can be inferred. Because most data have high (transformed) proportion of blacks by town, and MEDV is evenly distributed for houses with high (transformed) proportion of blacks by town, whether houses are located along Charles River or not.

3.13 Lower status of the population

LSTAT is calculated to be (proportion of adults without high school education + proportion of male laborers)/2 (David Harrison Jr 1978a).

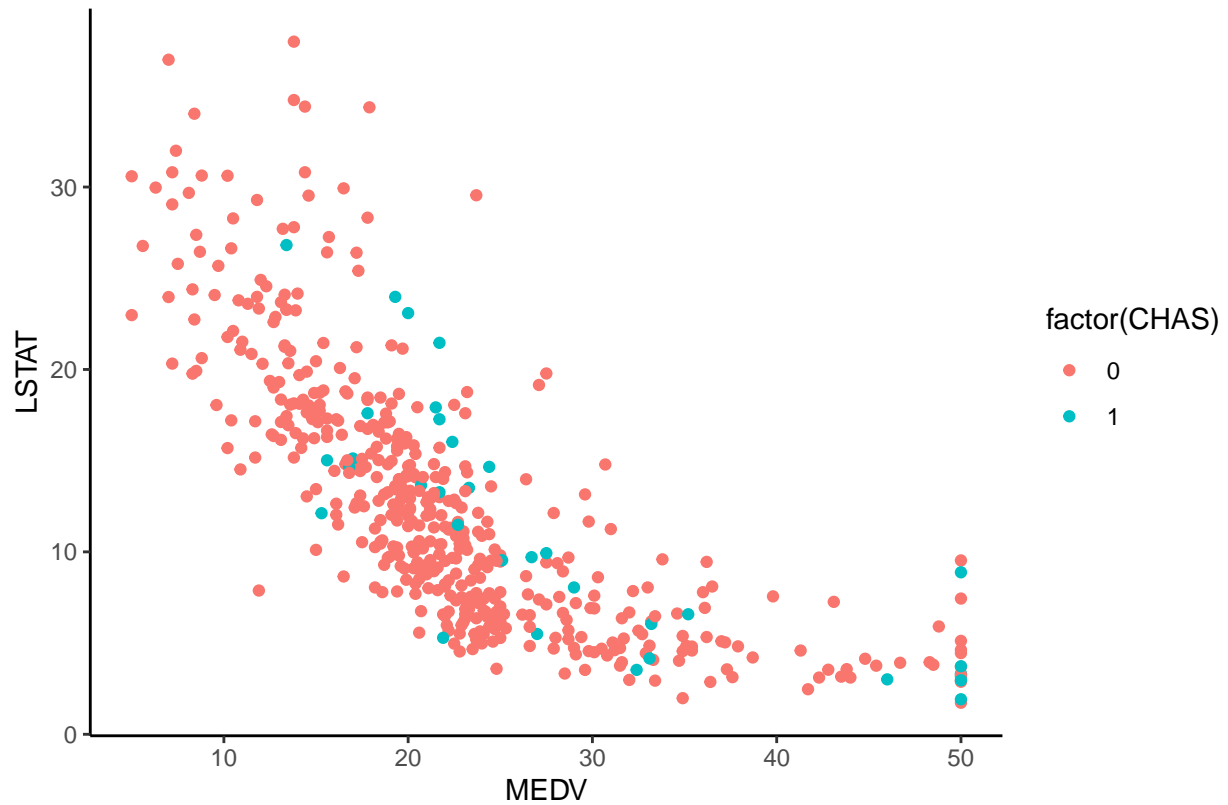
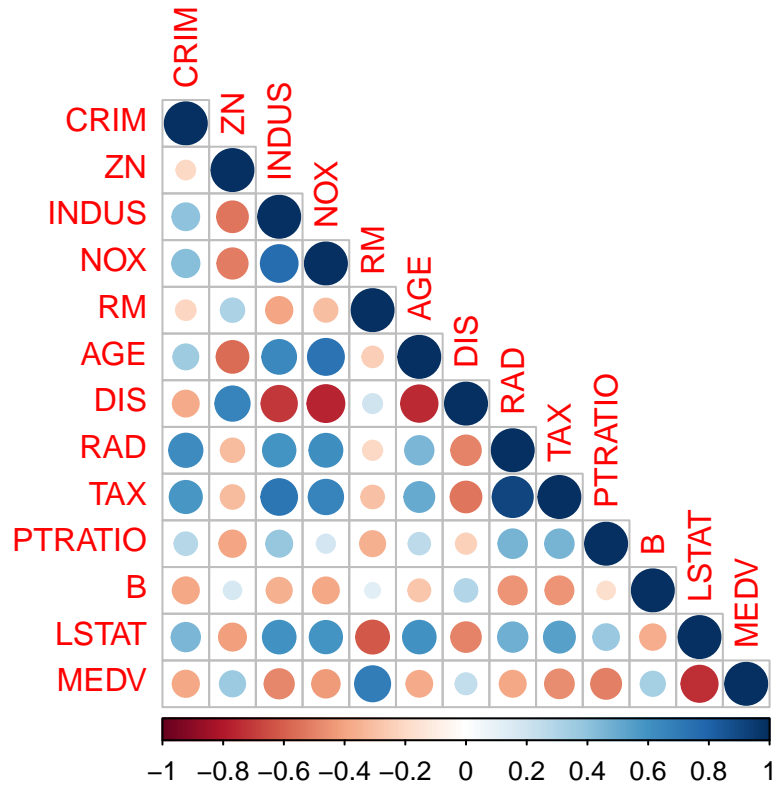


Figure 13: Median value of owner-occupied homes for different lower status of the population

Plotting lower status of the population vs MEDV, grouped by whether locating along Charles River, it can be seen that higher lower status of the population decreases house prices in a near linear way, whether houses are located along Charles River or not. The negative linear relationship between lower status of the population and MEDV seems to be the same for houses located along Charles River and for houses not located along Charles River.

3.14 Correlation plot



3.15 Prediction model for MEDV using linear regression

Table 3: Coefficient-Level Estimates for a Model Fitted to Estimate Variation in MEDV.

Predictor	B	SE	t	p
(Intercept)	39.90	5.520	7.23	0.000
CRIM	-0.12	0.035	-3.50	0.001
ZN	0.04	0.014	2.95	0.003
INDUS	0.03	0.068	0.44	0.662
CHAS1	2.25	0.879	2.56	0.011
NOX	-18.60	4.043	-4.60	0.000
RM	3.44	0.448	7.70	0.000
AGE	0.00	0.014	0.19	0.849
DIS	-1.47	0.218	-6.75	0.000
RAD	0.32	0.074	4.30	0.000
TAX	-0.01	0.004	-3.23	0.001
PTRATIO	-0.93	0.141	-6.59	0.000
B	0.01	0.003	2.61	0.009
LSTAT	-0.56	0.055	-10.18	0.000

As INDUS and AGE are not significant at 5% significance level, they should be dropped to obtain the new

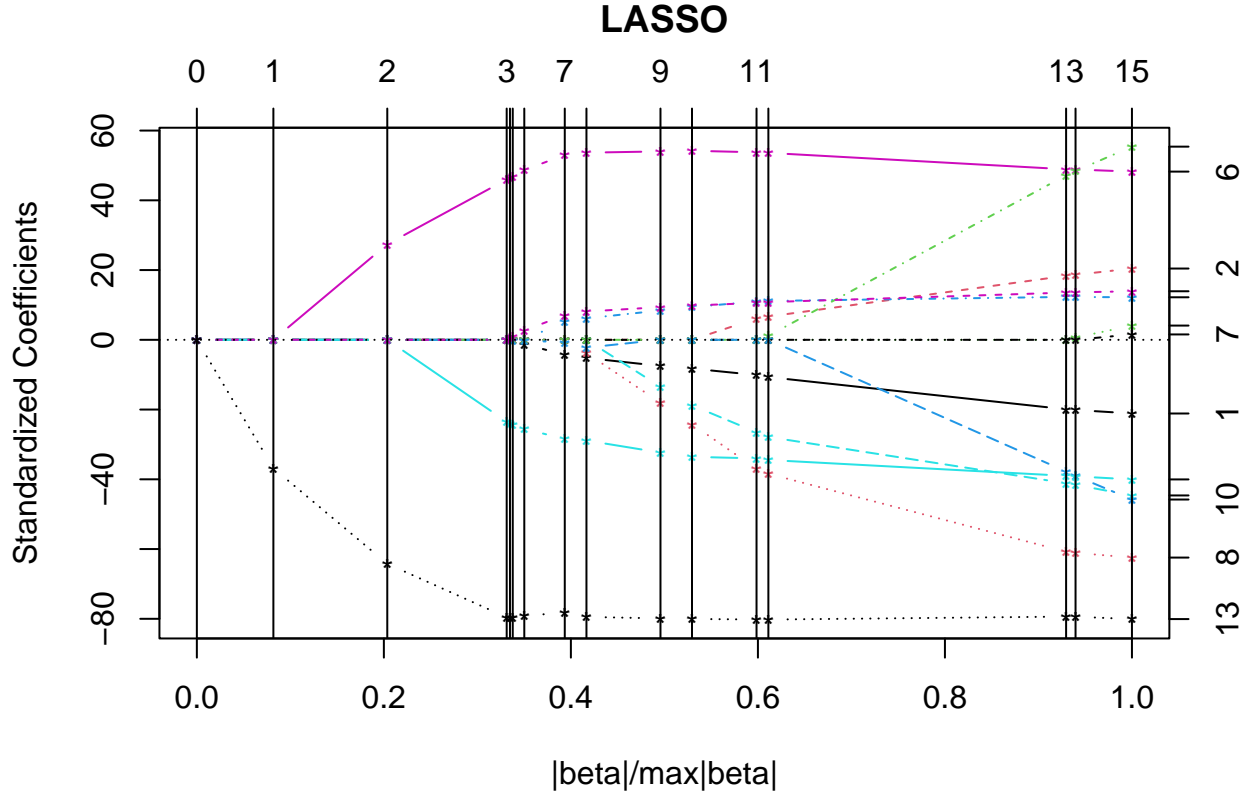
regression model below. 74.52 percent of the variation in the response **MEDV** is explained by new regression model, as its adjusted R-squared is 0.7452.

Table 4: Coefficient-Level Estimates for a Model Fitted to Estimate Variation in MEDV.

Predictor	B	SE	t	p
(Intercept)	39.71	5.480	7.25	0.000
CRIM	-0.12	0.035	-3.53	0.000
ZN	0.04	0.014	2.93	0.004
CHAS1	2.30	0.870	2.64	0.009
NOX	-17.92	3.741	-4.79	0.000
RM	3.45	0.433	7.95	0.000
DIS	-1.51	0.203	-7.41	0.000
RAD	0.31	0.071	4.35	0.000
TAX	-0.01	0.004	-3.36	0.001
PTRATIO	-0.92	0.140	-6.60	0.000
B	0.01	0.003	2.62	0.009
LSTAT	-0.55	0.051	-10.75	0.000

The calculated RMSE is 5.384884. RMSE is a measure of model performance. Small values indicate good model performance, and large values indicate bad model performance. Because the calculated RMSE for our model is 5.384884, which is small, we think linear regression model is a good one.

3.16 Prediction model for MEDV using LASSO Regression



The calculated RMSE is 5.548941 RMSE is a measure of model performance. Small values indicate good model performance, and large values indicate bad model performance. Because the calculated RMSE for our model is 5.548941, which is slightly bigger than the linear model, we think LASSO model is slightly worse than the linear regression model.

4 Final result

The best prediction model is given by:

$$\begin{aligned}
 MEDV = & 39.706131 - 0.122058 * CRIM + 0.041920 * ZN + 2.296506 * (CHAS = 1) \\
 & -17.920817 * NOX + 3.445127 * RM \\
 & -1.506440 * DIS + 0.306841 * RAD \\
 & -0.012808 * TAX - 0.921847 * PTRATIO + 0.007965 * B - 0.549754 * LSTAT
 \end{aligned}$$

Therefore, keeping all other variables fixed, houses that are located along Charles River tend to have \$2.296506 thousand higher price than houses that are not located along Charles River. The relationship between whether houses are located along Charles River or not and MEDV can be considered as linear. Because the LASSO regression did not produce a better result. However, because NOX has an estimated coefficient with magnitude about 8 times the estimated coefficient of CHAS, the effect of NOX can surpass the effect of locating along Charles River on house prices. People consider air quality to be much more important than all other factors.

5 Appendix

The full Boston housing table:

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
1	0.00632	18.0	2.31	0	0.5380	6.575	65.2
3	0.02731	0.0	7.07	0	0.4690	6.421	78.9
5	0.02729	0.0	7.07	0	0.4690	7.185	61.1
7	0.03237	0.0	2.18	0	0.4580	6.998	45.8
9	0.06905	0.0	2.18	0	0.4580	7.147	54.2
11	0.02985	0.0	2.18	0	0.4580	6.430	58.7
13	0.08829	12.5	7.87	0	0.5240	6.012	66.6
15	0.14455	12.5	7.87	0	0.5240	6.172	96.1
17	0.21124	12.5	7.87	0	0.5240	5.631	100.0
19	0.17004	12.5	7.87	0	0.5240	6.004	85.9
21	0.22489	12.5	7.87	0	0.5240	6.377	94.3
23	0.11747	12.5	7.87	0	0.5240	6.009	82.9
25	0.09378	12.5	7.87	0	0.5240	5.889	39.0
27	0.62976	0.0	8.14	0	0.5380	5.949	61.8
29	0.63796	0.0	8.14	0	0.5380	6.096	84.5
31	0.62739	0.0	8.14	0	0.5380	5.834	56.5
33	1.05393	0.0	8.14	0	0.5380	5.935	29.3
35	0.78420	0.0	8.14	0	0.5380	5.990	81.7
37	0.80271	0.0	8.14	0	0.5380	5.456	36.6
39	0.72580	0.0	8.14	0	0.5380	5.727	69.5
41	1.25179	0.0	8.14	0	0.5380	5.570	98.1
43	0.85204	0.0	8.14	0	0.5380	5.965	89.2
45	1.23247	0.0	8.14	0	0.5380	6.142	91.7
47	0.98843	0.0	8.14	0	0.5380	5.813	100.0
49	0.75026	0.0	8.14	0	0.5380	5.924	94.1
51	0.84054	0.0	8.14	0	0.5380	5.599	85.7
53	0.67191	0.0	8.14	0	0.5380	5.813	90.3
55	0.95577	0.0	8.14	0	0.5380	6.047	88.8
57	0.77299	0.0	8.14	0	0.5380	6.495	94.4
59	1.00245	0.0	8.14	0	0.5380	6.674	87.3
61	1.13081	0.0	8.14	0	0.5380	5.713	94.1
63	1.35472	0.0	8.14	0	0.5380	6.072	100.0
65	1.38799	0.0	8.14	0	0.5380	5.950	82.0
67	1.15172	0.0	8.14	0	0.5380	5.701	95.0
69	1.61282	0.0	8.14	0	0.5380	6.096	96.9
71	0.06417	0.0	5.96	0	0.4990	5.933	68.2
73	0.09744	0.0	5.96	0	0.4990	5.841	61.4
75	0.08014	0.0	5.96	0	0.4990	5.850	41.5
77	0.17505	0.0	5.96	0	0.4990	5.966	30.2
79	0.02763	75.0	2.95	0	0.4280	6.595	21.8
81	0.03359	75.0	2.95	0	0.4280	7.024	15.8
83	0.12744	0.0	6.91	0	0.4480	6.770	2.9
86	0.14150	0.0	6.91	0	0.4480	6.169	6.6
89	0.15936	0.0	6.91	0	0.4480	6.211	6.5
92	0.12269	0.0	6.91	0	0.4480	6.069	40.0
94	0.17142	0.0	6.91	0	0.4480	5.682	33.8
96	0.18836	0.0	6.91	0	0.4480	5.786	33.3
98	0.22927	0.0	6.91	0	0.4480	6.030	85.5

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
100	0.25387	0.0	6.91	0	0.4480	5.399	95.3
102	0.21977	0.0	6.91	0	0.4480	5.602	62.0
104	0.08873	21.0	5.64	0	0.4390	5.963	45.7
106	0.04337	21.0	5.64	0	0.4390	6.115	63.0
108	0.05360	21.0	5.64	0	0.4390	6.511	21.1
110	0.04981	21.0	5.64	0	0.4390	5.998	21.4
112	0.01360	75.0	4.00	0	0.4100	5.888	47.6
114	0.01311	90.0	1.22	0	0.4030	7.249	21.9
116	0.02055	85.0	0.74	0	0.4100	6.383	35.7
118	0.01432	100.0	1.32	0	0.4110	6.816	40.5
120	0.15445	25.0	5.13	0	0.4530	6.145	29.2
122	0.10328	25.0	5.13	0	0.4530	5.927	47.2
124	0.14932	25.0	5.13	0	0.4530	5.741	66.2
126	0.17171	25.0	5.13	0	0.4530	5.966	93.4
128	0.11027	25.0	5.13	0	0.4530	6.456	67.8
130	0.12650	25.0	5.13	0	0.4530	6.762	43.4
132	0.01951	17.5	1.38	0	0.4161	7.104	59.5
134	0.03584	80.0	3.37	0	0.3980	6.290	17.8
136	0.04379	80.0	3.37	0	0.3980	5.787	31.1
138	0.05789	12.5	6.07	0	0.4090	5.878	21.4
140	0.13554	12.5	6.07	0	0.4090	5.594	36.8
142	0.12816	12.5	6.07	0	0.4090	5.885	33.0
144	0.08826	0.0	10.81	0	0.4130	6.417	6.6
146	0.15876	0.0	10.81	0	0.4130	5.961	17.5
148	0.09164	0.0	10.81	0	0.4130	6.065	7.8
150	0.19539	0.0	10.81	0	0.4130	6.245	6.2
152	0.07896	0.0	12.83	0	0.4370	6.273	6.0
154	0.09512	0.0	12.83	0	0.4370	6.286	45.0
156	0.10153	0.0	12.83	0	0.4370	6.279	74.5
158	0.08707	0.0	12.83	0	0.4370	6.140	45.8
160	0.05646	0.0	12.83	0	0.4370	6.232	53.7
162	0.08387	0.0	12.83	0	0.4370	5.874	36.6
164	0.04113	25.0	4.86	0	0.4260	6.727	33.5
166	0.04462	25.0	4.86	0	0.4260	6.619	70.4
168	0.03659	25.0	4.86	0	0.4260	6.302	32.2
170	0.03551	25.0	4.86	0	0.4260	6.167	46.7
172	0.05059	0.0	4.49	0	0.4490	6.389	48.0
174	0.05735	0.0	4.49	0	0.4490	6.630	56.1
176	0.05188	0.0	4.49	0	0.4490	6.015	45.1
178	0.07151	0.0	4.49	0	0.4490	6.121	56.8
180	0.05660	0.0	3.41	0	0.4890	7.007	86.3
182	0.05302	0.0	3.41	0	0.4890	7.079	63.1
184	0.04684	0.0	3.41	0	0.4890	6.417	66.1
186	0.03932	0.0	3.41	0	0.4890	6.405	73.9
188	0.04203	28.0	15.04	0	0.4640	6.442	53.6
190	0.02875	28.0	15.04	0	0.4640	6.211	28.9
192	0.04294	28.0	15.04	0	0.4640	6.249	77.3
194	0.12204	0.0	2.89	0	0.4450	6.625	57.8
196	0.11504	0.0	2.89	0	0.4450	6.163	69.6
198	0.12083	0.0	2.89	0	0.4450	8.069	76.0
200	0.08187	0.0	2.89	0	0.4450	7.820	36.9
202	0.06860	0.0	2.89	0	0.4450	7.416	62.5

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
204	0.14866	0.0	8.56	0	0.5200	6.727	79.9
206	0.11432	0.0	8.56	0	0.5200	6.781	71.3
208	0.22876	0.0	8.56	0	0.5200	6.405	85.4
210	0.21161	0.0	8.56	0	0.5200	6.137	87.4
212	0.13960	0.0	8.56	0	0.5200	6.167	90.0
214	0.13262	0.0	8.56	0	0.5200	5.851	96.7
216	0.17120	0.0	8.56	0	0.5200	5.836	91.9
218	0.13117	0.0	8.56	0	0.5200	6.127	85.2
220	0.12802	0.0	8.56	0	0.5200	6.474	97.1
222	0.26363	0.0	8.56	0	0.5200	6.229	91.2
224	0.10793	0.0	8.56	0	0.5200	6.195	54.4
226	0.10084	0.0	10.01	0	0.5470	6.715	81.6
228	0.12329	0.0	10.01	0	0.5470	5.913	92.9
230	0.22212	0.0	10.01	0	0.5470	6.092	95.4
232	0.14231	0.0	10.01	0	0.5470	6.254	84.2
234	0.17134	0.0	10.01	0	0.5470	5.928	88.2
236	0.13158	0.0	10.01	0	0.5470	6.176	72.5
238	0.15098	0.0	10.01	0	0.5470	6.021	82.6
240	0.13058	0.0	10.01	0	0.5470	5.872	73.1
242	0.14476	0.0	10.01	0	0.5470	5.731	65.2
244	0.06899	0.0	25.65	0	0.5810	5.870	69.7
246	0.07165	0.0	25.65	0	0.5810	6.004	84.1
248	0.09299	0.0	25.65	0	0.5810	5.961	92.9
250	0.15038	0.0	25.65	0	0.5810	5.856	97.0
252	0.09849	0.0	25.65	0	0.5810	5.879	95.8
254	0.16902	0.0	25.65	0	0.5810	5.986	88.4
256	0.38735	0.0	25.65	0	0.5810	5.613	95.6
258	0.25915	0.0	21.89	0	0.6240	5.693	96.0
260	0.32543	0.0	21.89	0	0.6240	6.431	98.8
262	0.88125	0.0	21.89	0	0.6240	5.637	94.7
264	0.34006	0.0	21.89	0	0.6240	6.458	98.9
266	1.19294	0.0	21.89	0	0.6240	6.326	97.7
268	0.59005	0.0	21.89	0	0.6240	6.372	97.9
270	0.32982	0.0	21.89	0	0.6240	5.822	95.4
272	0.97617	0.0	21.89	0	0.6240	5.757	98.4
274	0.55778	0.0	21.89	0	0.6240	6.335	98.2
276	0.32264	0.0	21.89	0	0.6240	5.942	93.5
278	0.35233	0.0	21.89	0	0.6240	6.454	98.4
280	0.24980	0.0	21.89	0	0.6240	5.857	98.2
282	0.54452	0.0	21.89	0	0.6240	6.151	97.9
284	0.29090	0.0	21.89	0	0.6240	6.174	93.6
286	1.62864	0.0	21.89	0	0.6240	5.019	100.0
288	3.32105	0.0	19.58	1	0.8710	5.403	100.0
290	4.09740	0.0	19.58	0	0.8710	5.468	100.0
292	2.77974	0.0	19.58	0	0.8710	4.903	97.8
294	2.37934	0.0	19.58	0	0.8710	6.130	100.0
296	2.15505	0.0	19.58	0	0.8710	5.628	100.0
298	2.36862	0.0	19.58	0	0.8710	4.926	95.7
300	2.33099	0.0	19.58	0	0.8710	5.186	93.8
302	2.73397	0.0	19.58	0	0.8710	5.597	94.9
304	1.65660	0.0	19.58	0	0.8710	6.122	97.3
306	1.49632	0.0	19.58	0	0.8710	5.404	100.0

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
308	1.12658	0.0	19.58	1	0.8710	5.012	88.0
310	2.14918	0.0	19.58	0	0.8710	5.709	98.5
312	1.41385	0.0	19.58	1	0.8710	6.129	96.0
314	3.53501	0.0	19.58	1	0.8710	6.152	82.6
316	2.44668	0.0	19.58	0	0.8710	5.272	94.0
318	1.22358	0.0	19.58	0	0.6050	6.943	97.4
320	1.34284	0.0	19.58	0	0.6050	6.066	100.0
322	1.42502	0.0	19.58	0	0.8710	6.510	100.0
324	1.27346	0.0	19.58	1	0.6050	6.250	92.6
326	1.46336	0.0	19.58	0	0.6050	7.489	90.8
328	1.83377	0.0	19.58	1	0.6050	7.802	98.2
330	1.51902	0.0	19.58	1	0.6050	8.375	93.9
332	2.24236	0.0	19.58	0	0.6050	5.854	91.8
334	2.92400	0.0	19.58	0	0.6050	6.101	93.0
336	2.01019	0.0	19.58	0	0.6050	7.929	96.2
338	1.80028	0.0	19.58	0	0.6050	5.877	79.2
340	2.30040	0.0	19.58	0	0.6050	6.319	96.1
342	2.44953	0.0	19.58	0	0.6050	6.402	95.2
344	1.20742	0.0	19.58	0	0.6050	5.875	94.6
346	2.31390	0.0	19.58	0	0.6050	5.880	97.3
348	0.13914	0.0	4.05	0	0.5100	5.572	88.5
350	0.09178	0.0	4.05	0	0.5100	6.416	84.1
352	0.08447	0.0	4.05	0	0.5100	5.859	68.7
354	0.06664	0.0	4.05	0	0.5100	6.546	33.1
356	0.07022	0.0	4.05	0	0.5100	6.020	47.2
358	0.05425	0.0	4.05	0	0.5100	6.315	73.4
360	0.06642	0.0	4.05	0	0.5100	6.860	74.4
362	0.05780	0.0	2.46	0	0.4880	6.980	58.4
364	0.06588	0.0	2.46	0	0.4880	7.765	83.3
366	0.06888	0.0	2.46	0	0.4880	6.144	62.2
368	0.09103	0.0	2.46	0	0.4880	7.155	92.2
370	0.10008	0.0	2.46	0	0.4880	6.563	95.6
372	0.08308	0.0	2.46	0	0.4880	5.604	89.8
374	0.06047	0.0	2.46	0	0.4880	6.153	68.8
376	0.05602	0.0	2.46	0	0.4880	7.831	53.6
378	0.07875	45.0	3.44	0	0.4370	6.782	41.1
380	0.12579	45.0	3.44	0	0.4370	6.556	29.1
382	0.08370	45.0	3.44	0	0.4370	7.185	38.9
384	0.09068	45.0	3.44	0	0.4370	6.951	21.5
386	0.06911	45.0	3.44	0	0.4370	6.739	30.8
388	0.08664	45.0	3.44	0	0.4370	7.178	26.3
390	0.02187	60.0	2.93	0	0.4010	6.800	9.9
392	0.01439	60.0	2.93	0	0.4010	6.604	18.8
394	0.01381	80.0	0.46	0	0.4220	7.875	32.0
396	0.04011	80.0	1.52	0	0.4040	7.287	34.1
398	0.04666	80.0	1.52	0	0.4040	7.107	36.6
400	0.03768	80.0	1.52	0	0.4040	7.274	38.3
402	0.03150	95.0	1.47	0	0.4030	6.975	15.3
404	0.01778	95.0	1.47	0	0.4030	7.135	13.9
406	0.03445	82.5	2.03	0	0.4150	6.162	38.4
408	0.02177	82.5	2.03	0	0.4150	7.610	15.7
410	0.03510	95.0	2.68	0	0.4161	7.853	33.2

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
412	0.02009	95.0	2.68	0	0.4161	8.034	31.9
414	0.13642	0.0	10.59	0	0.4890	5.891	22.3
416	0.22969	0.0	10.59	0	0.4890	6.326	52.5
418	0.25199	0.0	10.59	0	0.4890	5.783	72.7
420	0.13587	0.0	10.59	1	0.4890	6.064	59.1
422	0.43571	0.0	10.59	1	0.4890	5.344	100.0
424	0.17446	0.0	10.59	1	0.4890	5.960	92.1
426	0.37578	0.0	10.59	1	0.4890	5.404	88.6
428	0.21719	0.0	10.59	1	0.4890	5.807	53.8
430	0.14052	0.0	10.59	0	0.4890	6.375	32.3
432	0.28955	0.0	10.59	0	0.4890	5.412	9.8
434	0.19802	0.0	10.59	0	0.4890	6.182	42.4
436	0.04560	0.0	13.89	1	0.5500	5.888	56.0
438	0.07013	0.0	13.89	0	0.5500	6.642	85.1
440	0.11069	0.0	13.89	1	0.5500	5.951	93.8
442	0.11425	0.0	13.89	1	0.5500	6.373	92.4
444	0.35809	0.0	6.20	1	0.5070	6.951	88.5
446	0.40771	0.0	6.20	1	0.5070	6.164	91.3
448	0.62356	0.0	6.20	1	0.5070	6.879	77.7
450	0.61470	0.0	6.20	0	0.5070	6.618	80.8
452	0.31533	0.0	6.20	0	0.5040	8.266	78.3
454	0.52693	0.0	6.20	0	0.5040	8.725	83.0
456	0.38214	0.0	6.20	0	0.5040	8.040	86.5
458	0.41238	0.0	6.20	0	0.5040	7.163	79.9
460	0.29819	0.0	6.20	0	0.5040	7.686	17.0
462	0.44178	0.0	6.20	0	0.5040	6.552	21.4
464	0.53700	0.0	6.20	0	0.5040	5.981	68.1
466	0.46296	0.0	6.20	0	0.5040	7.412	76.9
468	0.57529	0.0	6.20	0	0.5070	8.337	73.3
470	0.33147	0.0	6.20	0	0.5070	8.247	70.4
472	0.44791	0.0	6.20	1	0.5070	6.726	66.5
474	0.33045	0.0	6.20	0	0.5070	6.086	61.5
476	0.52058	0.0	6.20	1	0.5070	6.631	76.5
478	0.51183	0.0	6.20	0	0.5070	7.358	71.6
480	0.08244	30.0	4.93	0	0.4280	6.481	18.5
482	0.09252	30.0	4.93	0	0.4280	6.606	42.2
484	0.11329	30.0	4.93	0	0.4280	6.897	54.3
486	0.10612	30.0	4.93	0	0.4280	6.095	65.1
488	0.10290	30.0	4.93	0	0.4280	6.358	52.9
490	0.12757	30.0	4.93	0	0.4280	6.393	7.8
492	0.20608	22.0	5.86	0	0.4310	5.593	76.5
494	0.19133	22.0	5.86	0	0.4310	5.605	70.2
496	0.33983	22.0	5.86	0	0.4310	6.108	34.9
498	0.19657	22.0	5.86	0	0.4310	6.226	79.2
500	0.16439	22.0	5.86	0	0.4310	6.433	49.1
502	0.19073	22.0	5.86	0	0.4310	6.718	17.5
504	0.14030	22.0	5.86	0	0.4310	6.487	13.0
506	0.21409	22.0	5.86	0	0.4310	6.438	8.9
508	0.08221	22.0	5.86	0	0.4310	6.957	6.8
510	0.36894	22.0	5.86	0	0.4310	8.259	8.4
512	0.04819	80.0	3.64	0	0.3920	6.108	32.0
514	0.03548	80.0	3.64	0	0.3920	5.876	19.1

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
516	0.01538	90.0	3.75	0	0.3940	7.454	34.2
518	0.61154	20.0	3.97	0	0.6470	8.704	86.9
520	0.66351	20.0	3.97	0	0.6470	7.333	100.0
522	0.65665	20.0	3.97	0	0.6470	6.842	100.0
524	0.54011	20.0	3.97	0	0.6470	7.203	81.8
526	0.53412	20.0	3.97	0	0.6470	7.520	89.4
528	0.52014	20.0	3.97	0	0.6470	8.398	91.5
530	0.82526	20.0	3.97	0	0.6470	7.327	94.5
532	0.55007	20.0	3.97	0	0.6470	7.206	91.6
534	0.76162	20.0	3.97	0	0.6470	5.560	62.8
536	0.78570	20.0	3.97	0	0.6470	7.014	84.6
538	0.57834	20.0	3.97	0	0.5750	8.297	67.0
540	0.54050	20.0	3.97	0	0.5750	7.470	52.6
542	0.09065	20.0	6.96	1	0.4640	5.920	61.5
544	0.29916	20.0	6.96	0	0.4640	5.856	42.1
546	0.16211	20.0	6.96	0	0.4640	6.240	16.3
548	0.11460	20.0	6.96	0	0.4640	6.538	58.7
550	0.22188	20.0	6.96	1	0.4640	7.691	51.8
552	0.05644	40.0	6.41	1	0.4470	6.758	32.9
554	0.09604	40.0	6.41	0	0.4470	6.854	42.8
556	0.10469	40.0	6.41	1	0.4470	7.267	49.0
558	0.06127	40.0	6.41	1	0.4470	6.826	27.6
560	0.07978	40.0	6.41	0	0.4470	6.482	32.1
562	0.21038	20.0	3.33	0	0.4429	6.812	32.2
564	0.03578	20.0	3.33	0	0.4429	7.820	64.5
566	0.03705	20.0	3.33	0	0.4429	6.968	37.2
568	0.06129	20.0	3.33	1	0.4429	7.645	49.7
570	0.01501	90.0	1.21	1	0.4010	7.923	24.8
572	0.00906	90.0	2.97	0	0.4000	7.088	20.8
574	0.01096	55.0	2.25	0	0.3890	6.453	31.9
576	0.01965	80.0	1.76	0	0.3850	6.230	31.5
578	0.03871	52.5	5.32	0	0.4050	6.209	31.3
580	0.04590	52.5	5.32	0	0.4050	6.315	45.6
582	0.04297	52.5	5.32	0	0.4050	6.565	22.9
584	0.03502	80.0	4.95	0	0.4110	6.861	27.9
586	0.07886	80.0	4.95	0	0.4110	7.148	27.7
588	0.03615	80.0	4.95	0	0.4110	6.630	23.4
590	0.08265	0.0	13.92	0	0.4370	6.127	18.4
592	0.08199	0.0	13.92	0	0.4370	6.009	42.3
594	0.12932	0.0	13.92	0	0.4370	6.678	31.1
596	0.05372	0.0	13.92	0	0.4370	6.549	51.0
598	0.14103	0.0	13.92	0	0.4370	5.790	58.0
600	0.06466	70.0	2.24	0	0.4000	6.345	20.1
602	0.05561	70.0	2.24	0	0.4000	7.041	10.0
604	0.04417	70.0	2.24	0	0.4000	6.871	47.4
606	0.03537	34.0	6.09	0	0.4330	6.590	40.4
608	0.09266	34.0	6.09	0	0.4330	6.495	18.4
610	0.10000	34.0	6.09	0	0.4330	6.982	17.7
612	0.05515	33.0	2.18	0	0.4720	7.236	41.1
614	0.05479	33.0	2.18	0	0.4720	6.616	58.1
616	0.07503	33.0	2.18	0	0.4720	7.420	71.9
618	0.04932	33.0	2.18	0	0.4720	6.849	70.3

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
620	0.49298	0.0	9.90	0	0.5440	6.635	82.5
622	0.34940	0.0	9.90	0	0.5440	5.972	76.7
624	2.63548	0.0	9.90	0	0.5440	4.973	37.8
626	0.79041	0.0	9.90	0	0.5440	6.122	52.8
628	0.26169	0.0	9.90	0	0.5440	6.023	90.4
630	0.26938	0.0	9.90	0	0.5440	6.266	82.8
632	0.36920	0.0	9.90	0	0.5440	6.567	87.3
634	0.25356	0.0	9.90	0	0.5440	5.705	77.7
636	0.31827	0.0	9.90	0	0.5440	5.914	83.2
638	0.24522	0.0	9.90	0	0.5440	5.782	71.7
640	0.40202	0.0	9.90	0	0.5440	6.382	67.2
642	0.47547	0.0	9.90	0	0.5440	6.113	58.8
644	0.16760	0.0	7.38	0	0.4930	6.426	52.3
646	0.18159	0.0	7.38	0	0.4930	6.376	54.3
648	0.35114	0.0	7.38	0	0.4930	6.041	49.9
650	0.28392	0.0	7.38	0	0.4930	5.708	74.3
652	0.34109	0.0	7.38	0	0.4930	6.415	40.1
654	0.19186	0.0	7.38	0	0.4930	6.431	14.7
656	0.30347	0.0	7.38	0	0.4930	6.312	28.9
658	0.24103	0.0	7.38	0	0.4930	6.083	43.7
660	0.06617	0.0	3.24	0	0.4600	5.868	25.8
662	0.06724	0.0	3.24	0	0.4600	6.333	17.2
664	0.04544	0.0	3.24	0	0.4600	6.144	32.2
666	0.05023	35.0	6.06	0	0.4379	5.706	28.4
668	0.03466	35.0	6.06	0	0.4379	6.031	23.3
670	0.05083	0.0	5.19	0	0.5150	6.316	38.1
672	0.03738	0.0	5.19	0	0.5150	6.310	38.5
674	0.03961	0.0	5.19	0	0.5150	6.037	34.5
676	0.03427	0.0	5.19	0	0.5150	5.869	46.3
678	0.03041	0.0	5.19	0	0.5150	5.895	59.6
680	0.03306	0.0	5.19	0	0.5150	6.059	37.3
682	0.05497	0.0	5.19	0	0.5150	5.985	45.4
684	0.06151	0.0	5.19	0	0.5150	5.968	58.5
686	0.01301	35.0	1.52	0	0.4420	7.241	49.3
688	0.02498	0.0	1.89	0	0.5180	6.540	59.7
690	0.02543	55.0	3.78	0	0.4840	6.696	56.4
692	0.03049	55.0	3.78	0	0.4840	6.874	28.1
694	0.03113	0.0	4.39	0	0.4420	6.014	48.5
696	0.06162	0.0	4.39	0	0.4420	5.898	52.3
698	0.01870	85.0	4.15	0	0.4290	6.516	27.7
700	0.01501	80.0	2.01	0	0.4350	6.635	29.7
702	0.02899	40.0	1.25	0	0.4290	6.939	34.5
704	0.06211	40.0	1.25	0	0.4290	6.490	44.4
706	0.07950	60.0	1.69	0	0.4110	6.579	35.9
708	0.07244	60.0	1.69	0	0.4110	5.884	18.5
710	0.01709	90.0	2.02	0	0.4100	6.728	36.1
712	0.04301	80.0	1.91	0	0.4130	5.663	21.9
714	0.10659	80.0	1.91	0	0.4130	5.936	19.5
716	8.98296	0.0	18.10	1	0.7700	6.212	97.4
718	3.84970	0.0	18.10	1	0.7700	6.395	91.0
720	5.20177	0.0	18.10	1	0.7700	6.127	83.4
722	4.26131	0.0	18.10	0	0.7700	6.112	81.3

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
724	4.54192	0.0	18.10	0	0.7700	6.398	88.0
726	3.83684	0.0	18.10	0	0.7700	6.251	91.1
728	3.67822	0.0	18.10	0	0.7700	5.362	96.2
730	4.22239	0.0	18.10	1	0.7700	5.803	89.0
732	3.47428	0.0	18.10	1	0.7180	8.780	82.9
734	4.55587	0.0	18.10	0	0.7180	3.561	87.9
736	3.69695	0.0	18.10	0	0.7180	4.963	91.4
738	13.52220	0.0	18.10	0	0.6310	3.863	100.0
740	4.89822	0.0	18.10	0	0.6310	4.970	100.0
742	5.66998	0.0	18.10	1	0.6310	6.683	96.8
744	6.53876	0.0	18.10	1	0.6310	7.016	97.5
746	9.23230	0.0	18.10	0	0.6310	6.216	100.0
748	8.26725	0.0	18.10	1	0.6680	5.875	89.6
750	11.10810	0.0	18.10	0	0.6680	4.906	100.0
752	18.49820	0.0	18.10	0	0.6680	4.138	100.0
754	19.60910	0.0	18.10	0	0.6710	7.313	97.9
756	15.28800	0.0	18.10	0	0.6710	6.649	93.3
758	9.82349	0.0	18.10	0	0.6710	6.794	98.8
760	23.64820	0.0	18.10	0	0.6710	6.380	96.2
762	17.86670	0.0	18.10	0	0.6710	6.223	100.0
764	88.97620	0.0	18.10	0	0.6710	6.968	91.9
766	15.87440	0.0	18.10	0	0.6710	6.545	99.1
768	9.18702	0.0	18.10	0	0.7000	5.536	100.0
770	7.99248	0.0	18.10	0	0.7000	5.520	100.0
772	20.08490	0.0	18.10	0	0.7000	4.368	91.2
774	16.81180	0.0	18.10	0	0.7000	5.277	98.1
776	24.39380	0.0	18.10	0	0.7000	4.652	100.0
778	22.59710	0.0	18.10	0	0.7000	5.000	89.5
780	14.33370	0.0	18.10	0	0.7000	4.880	100.0
782	8.15174	0.0	18.10	0	0.7000	5.390	98.9
784	6.96215	0.0	18.10	0	0.7000	5.713	97.0
786	5.29305	0.0	18.10	0	0.7000	6.051	82.5
788	11.57790	0.0	18.10	0	0.7000	5.036	97.0
790	8.64476	0.0	18.10	0	0.6930	6.193	92.6
792	13.35980	0.0	18.10	0	0.6930	5.887	94.7
794	8.71675	0.0	18.10	0	0.6930	6.471	98.8
796	5.87205	0.0	18.10	0	0.6930	6.405	96.0
798	7.67202	0.0	18.10	0	0.6930	5.747	98.9
800	38.35180	0.0	18.10	0	0.6930	5.453	100.0
802	9.91655	0.0	18.10	0	0.6930	5.852	77.8
804	25.04610	0.0	18.10	0	0.6930	5.987	100.0
806	14.23620	0.0	18.10	0	0.6930	6.343	100.0
808	9.59571	0.0	18.10	0	0.6930	6.404	100.0
810	24.80170	0.0	18.10	0	0.6930	5.349	96.0
812	41.52920	0.0	18.10	0	0.6930	5.531	85.4
814	67.92080	0.0	18.10	0	0.6930	5.683	100.0
816	20.71620	0.0	18.10	0	0.6590	4.138	100.0
818	11.95110	0.0	18.10	0	0.6590	5.608	100.0
820	7.40389	0.0	18.10	0	0.5970	5.617	97.9
822	14.43830	0.0	18.10	0	0.5970	6.852	100.0
824	51.13580	0.0	18.10	0	0.5970	5.757	100.0
826	14.05070	0.0	18.10	0	0.5970	6.657	100.0

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
828	18.81100	0.0	18.10	0	0.5970	4.628	100.0
830	28.65580	0.0	18.10	0	0.5970	5.155	100.0
832	45.74610	0.0	18.10	0	0.6930	4.519	100.0
834	18.08460	0.0	18.10	0	0.6790	6.434	100.0
836	10.83420	0.0	18.10	0	0.6790	6.782	90.8
838	25.94060	0.0	18.10	0	0.6790	5.304	89.1
840	73.53410	0.0	18.10	0	0.6790	5.957	100.0
842	11.81230	0.0	18.10	0	0.7180	6.824	76.5
844	11.08740	0.0	18.10	0	0.7180	6.411	100.0
846	7.02259	0.0	18.10	0	0.7180	6.006	95.3
848	12.04820	0.0	18.10	0	0.6140	5.648	87.6
850	7.05042	0.0	18.10	0	0.6140	6.103	85.1
852	8.79212	0.0	18.10	0	0.5840	5.565	70.6
854	15.86030	0.0	18.10	0	0.6790	5.896	95.4
856	12.24720	0.0	18.10	0	0.5840	5.837	59.7
858	37.66190	0.0	18.10	0	0.6790	6.202	78.7
860	7.36711	0.0	18.10	0	0.6790	6.193	78.1
862	9.33889	0.0	18.10	0	0.6790	6.380	95.6
864	8.49213	0.0	18.10	0	0.5840	6.348	86.1
866	10.06230	0.0	18.10	0	0.5840	6.833	94.3
868	6.44405	0.0	18.10	0	0.5840	6.425	74.8
870	5.58107	0.0	18.10	0	0.7130	6.436	87.9
872	13.91340	0.0	18.10	0	0.7130	6.208	95.0
874	11.16040	0.0	18.10	0	0.7400	6.629	94.6
876	14.42080	0.0	18.10	0	0.7400	6.461	93.3
878	15.17720	0.0	18.10	0	0.7400	6.152	100.0
880	13.67810	0.0	18.10	0	0.7400	5.935	87.9
882	9.39063	0.0	18.10	0	0.7400	5.627	93.9
884	22.05110	0.0	18.10	0	0.7400	5.818	92.4
886	9.72418	0.0	18.10	0	0.7400	6.406	97.2
888	5.66637	0.0	18.10	0	0.7400	6.219	100.0
890	9.96654	0.0	18.10	0	0.7400	6.485	100.0
892	12.80230	0.0	18.10	0	0.7400	5.854	96.6
894	10.67180	0.0	18.10	0	0.7400	6.459	94.8
896	6.28807	0.0	18.10	0	0.7400	6.341	96.4
898	9.92485	0.0	18.10	0	0.7400	6.251	96.6
900	9.32909	0.0	18.10	0	0.7130	6.185	98.7
902	7.52601	0.0	18.10	0	0.7130	6.417	98.3
904	6.71772	0.0	18.10	0	0.7130	6.749	92.6
906	5.44114	0.0	18.10	0	0.7130	6.655	98.2
908	5.09017	0.0	18.10	0	0.7130	6.297	91.8
910	8.24809	0.0	18.10	0	0.7130	7.393	99.3
912	9.51363	0.0	18.10	0	0.7130	6.728	94.1
914	4.75237	0.0	18.10	0	0.7130	6.525	86.5
916	4.66883	0.0	18.10	0	0.7130	5.976	87.9
918	8.20058	0.0	18.10	0	0.7130	5.936	80.3
920	7.75223	0.0	18.10	0	0.7130	6.301	83.7
922	6.80117	0.0	18.10	0	0.7130	6.081	84.4
924	4.81213	0.0	18.10	0	0.7130	6.701	90.0
926	3.69311	0.0	18.10	0	0.7130	6.376	88.4
928	6.65492	0.0	18.10	0	0.7130	6.317	83.0
930	5.82115	0.0	18.10	0	0.7130	6.513	89.9

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE
932	7.83932	0.0	18.10	0	0.6550	6.209	65.4
934	3.16360	0.0	18.10	0	0.6550	5.759	48.2
936	3.77498	0.0	18.10	0	0.6550	5.952	84.7
938	4.42228	0.0	18.10	0	0.5840	6.003	94.5
940	15.57570	0.0	18.10	0	0.5800	5.926	71.0
942	13.07510	0.0	18.10	0	0.5800	5.713	56.7
944	4.34879	0.0	18.10	0	0.5800	6.167	84.0
946	4.03841	0.0	18.10	0	0.5320	6.229	90.7
948	3.56868	0.0	18.10	0	0.5800	6.437	75.0
950	4.64689	0.0	18.10	0	0.6140	6.980	67.6
952	8.05579	0.0	18.10	0	0.5840	5.427	95.4
954	6.39312	0.0	18.10	0	0.5840	6.162	97.4
956	4.87141	0.0	18.10	0	0.6140	6.484	93.6
958	15.02340	0.0	18.10	0	0.6140	5.304	97.3
960	10.23300	0.0	18.10	0	0.6140	6.185	96.7
962	14.33370	0.0	18.10	0	0.6140	6.229	88.0
964	5.82401	0.0	18.10	0	0.5320	6.242	64.7
966	5.70818	0.0	18.10	0	0.5320	6.750	74.9
968	5.73116	0.0	18.10	0	0.5320	7.061	77.0
970	2.81838	0.0	18.10	0	0.5320	5.762	40.3
972	2.37857	0.0	18.10	0	0.5830	5.871	41.9
974	3.67367	0.0	18.10	0	0.5830	6.312	51.9
976	5.69175	0.0	18.10	0	0.5830	6.114	79.8
978	4.83567	0.0	18.10	0	0.5830	5.905	53.2
980	0.15086	0.0	27.74	0	0.6090	5.454	92.7
982	0.18337	0.0	27.74	0	0.6090	5.414	98.3
984	0.20746	0.0	27.74	0	0.6090	5.093	98.0
986	0.10574	0.0	27.74	0	0.6090	5.983	98.8
988	0.11132	0.0	27.74	0	0.6090	5.983	83.5
990	0.17331	0.0	9.69	0	0.5850	5.707	54.0
992	0.27957	0.0	9.69	0	0.5850	5.926	42.6
994	0.17899	0.0	9.69	0	0.5850	5.670	28.8
996	0.28960	0.0	9.69	0	0.5850	5.390	72.9
998	0.26838	0.0	9.69	0	0.5850	5.794	70.6
1000	0.23912	0.0	9.69	0	0.5850	6.019	65.3
1002	0.17783	0.0	9.69	0	0.5850	5.569	73.5
1004	0.22438	0.0	9.69	0	0.5850	6.027	79.7
1006	0.06263	0.0	11.93	0	0.5730	6.593	69.1
1008	0.04527	0.0	11.93	0	0.5730	6.120	76.7
1010	0.06076	0.0	11.93	0	0.5730	6.976	91.0
1012	0.10959	0.0	11.93	0	0.5730	6.794	89.3
1014	0.04741	0.0	11.93	0	0.5730	6.030	80.8

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
1	4.0900	1	296	15.3	396.90	4.98	24.0
3	4.9671	2	242	17.8	396.90	9.14	21.6
5	4.9671	2	242	17.8	392.83	4.03	34.7
7	6.0622	3	222	18.7	394.63	2.94	33.4
9	6.0622	3	222	18.7	396.90	5.33	36.2
11	6.0622	3	222	18.7	394.12	5.21	28.7

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
13	5.5605	5	311	15.2	395.60	12.43	22.9
15	5.9505	5	311	15.2	396.90	19.15	27.1
17	6.0821	5	311	15.2	386.63	29.93	16.5
19	6.5921	5	311	15.2	386.71	17.10	18.9
21	6.3467	5	311	15.2	392.52	20.45	15.0
23	6.2267	5	311	15.2	396.90	13.27	18.9
25	5.4509	5	311	15.2	390.50	15.71	21.7
27	4.7075	4	307	21.0	396.90	8.26	20.4
29	4.4619	4	307	21.0	380.02	10.26	18.2
31	4.4986	4	307	21.0	395.62	8.47	19.9
33	4.4986	4	307	21.0	386.85	6.58	23.1
35	4.2579	4	307	21.0	386.75	14.67	17.5
37	3.7965	4	307	21.0	288.99	11.69	20.2
39	3.7965	4	307	21.0	390.95	11.28	18.2
41	3.7979	4	307	21.0	376.57	21.02	13.6
43	4.0123	4	307	21.0	392.53	13.83	19.6
45	3.9769	4	307	21.0	396.90	18.72	15.2
47	4.0952	4	307	21.0	394.54	19.88	14.5
49	4.3996	4	307	21.0	394.33	16.30	15.6
51	4.4546	4	307	21.0	303.42	16.51	13.9
53	4.6820	4	307	21.0	376.88	14.81	16.6
55	4.4534	4	307	21.0	306.38	17.28	14.8
57	4.4547	4	307	21.0	387.94	12.80	18.4
59	4.2390	4	307	21.0	380.23	11.98	21.0
61	4.2330	4	307	21.0	360.17	22.60	12.7
63	4.1750	4	307	21.0	376.73	13.04	14.5
65	3.9900	4	307	21.0	232.60	27.71	13.2
67	3.7872	4	307	21.0	358.77	18.35	13.1
69	3.7598	4	307	21.0	248.31	20.34	13.5
71	3.3603	5	279	19.2	396.90	9.68	18.9
73	3.3779	5	279	19.2	377.56	11.41	20.0
75	3.9342	5	279	19.2	396.90	8.77	21.0
77	3.8473	5	279	19.2	393.43	10.13	24.7
79	5.4011	3	252	18.3	395.63	4.32	30.8
81	5.4011	3	252	18.3	395.62	1.98	34.9
83	5.7209	3	233	17.9	385.41	4.84	26.6
86	5.7209	3	233	17.9	383.37	5.81	25.3
89	5.7209	3	233	17.9	394.46	7.44	24.7
92	5.7209	3	233	17.9	389.39	9.55	21.2
94	5.1004	3	233	17.9	396.90	10.21	19.3
96	5.1004	3	233	17.9	396.90	14.15	20.0
98	5.6894	3	233	17.9	392.74	18.80	16.6
100	5.8700	3	233	17.9	396.90	30.81	14.4
102	6.0877	3	233	17.9	396.90	16.20	19.4
104	6.8147	4	243	16.8	395.56	13.45	19.7
106	6.8147	4	243	16.8	393.97	9.43	20.5
108	6.8147	4	243	16.8	396.90	5.28	25.0
110	6.8147	4	243	16.8	396.90	8.43	23.4
112	7.3197	3	469	21.1	396.90	14.80	18.9
114	8.6966	5	226	17.9	395.93	4.81	35.4
116	9.1876	2	313	17.3	396.90	5.77	24.7
118	8.3248	5	256	15.1	392.90	3.95	31.6

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
120	7.8148	8	284	19.7	390.68	6.86	23.3
122	6.9320	8	284	19.7	396.90	9.22	19.6
124	7.2254	8	284	19.7	395.11	13.15	18.7
126	6.8185	8	284	19.7	378.08	14.44	16.0
128	7.2255	8	284	19.7	396.90	6.73	22.2
130	7.9809	8	284	19.7	395.58	9.50	25.0
132	9.2229	3	216	18.6	393.24	8.05	33.0
134	6.6115	4	337	16.1	396.90	4.67	23.5
136	6.6115	4	337	16.1	396.90	10.24	19.4
138	6.4980	4	345	18.9	396.21	8.10	22.0
140	6.4980	4	345	18.9	396.90	13.09	17.4
142	6.4980	4	345	18.9	396.90	8.79	20.9
144	5.2873	4	305	19.2	383.73	6.72	24.2
146	5.2873	4	305	19.2	376.94	9.88	21.7
148	5.2873	4	305	19.2	390.91	5.52	22.8
150	5.2873	4	305	19.2	377.17	7.54	23.4
152	4.2515	5	398	18.7	394.92	6.78	24.1
154	4.5026	5	398	18.7	383.23	8.94	21.4
156	4.0522	5	398	18.7	373.66	11.97	20.0
158	4.0905	5	398	18.7	386.96	10.27	20.8
160	5.0141	5	398	18.7	386.40	12.34	21.2
162	4.5026	5	398	18.7	396.06	9.10	20.3
164	5.4007	4	281	19.0	396.90	5.29	28.0
166	5.4007	4	281	19.0	395.63	7.22	23.9
168	5.4007	4	281	19.0	396.90	6.72	24.8
170	5.4007	4	281	19.0	390.64	7.51	22.9
172	4.7794	3	247	18.5	396.90	9.62	23.9
174	4.4377	3	247	18.5	392.30	6.53	26.6
176	4.4272	3	247	18.5	395.99	12.86	22.5
178	3.7476	3	247	18.5	395.15	8.44	22.2
180	3.4217	2	270	17.8	396.90	5.50	23.6
182	3.4145	2	270	17.8	396.06	5.70	28.7
184	3.0923	2	270	17.8	392.18	8.81	22.6
186	3.0921	2	270	17.8	393.55	8.20	22.0
188	3.6659	4	270	18.2	395.01	8.16	22.9
190	3.6659	4	270	18.2	396.33	6.21	25.0
192	3.6150	4	270	18.2	396.90	10.59	20.6
194	3.4952	2	276	18.0	357.98	6.65	28.4
196	3.4952	2	276	18.0	391.83	11.34	21.4
198	3.4952	2	276	18.0	396.90	4.21	38.7
200	3.4952	2	276	18.0	393.53	3.57	43.8
202	3.4952	2	276	18.0	396.90	6.19	33.2
204	2.7778	5	384	20.9	394.76	9.42	27.5
206	2.8561	5	384	20.9	395.58	7.67	26.5
208	2.7147	5	384	20.9	70.80	10.63	18.6
210	2.7147	5	384	20.9	394.47	13.44	19.3
212	2.4210	5	384	20.9	392.69	12.33	20.1
214	2.1069	5	384	20.9	394.05	16.47	19.5
216	2.2110	5	384	20.9	395.67	18.66	19.5
218	2.1224	5	384	20.9	387.69	14.09	20.4
220	2.4329	5	384	20.9	395.24	12.27	19.8
222	2.5451	5	384	20.9	391.23	15.55	19.4

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
224	2.7778	5	384	20.9	393.49	13.00	21.7
226	2.6775	6	432	17.8	395.59	10.16	22.8
228	2.3534	6	432	17.8	394.95	16.21	18.8
230	2.5480	6	432	17.8	396.90	17.09	18.7
232	2.2565	6	432	17.8	388.74	10.45	18.5
234	2.4631	6	432	17.8	344.91	15.76	18.3
236	2.7301	6	432	17.8	393.30	12.04	21.2
238	2.7474	6	432	17.8	394.51	10.30	19.2
240	2.4775	6	432	17.8	338.63	15.37	20.4
242	2.7592	6	432	17.8	391.50	13.61	19.3
244	2.2577	2	188	19.1	389.15	14.37	22.0
246	2.1974	2	188	19.1	377.67	14.27	20.3
248	2.0869	2	188	19.1	378.09	17.93	20.5
250	1.9444	2	188	19.1	370.31	25.41	17.3
252	2.0063	2	188	19.1	379.38	17.58	18.8
254	1.9929	2	188	19.1	385.02	14.81	21.4
256	1.7572	2	188	19.1	359.29	27.26	15.7
258	1.7883	4	437	21.2	392.11	17.19	16.2
260	1.8125	4	437	21.2	396.90	15.39	18.0
262	1.9799	4	437	21.2	396.90	18.34	14.3
264	2.1185	4	437	21.2	395.04	12.60	19.2
266	2.2710	4	437	21.2	396.90	12.26	19.6
268	2.3274	4	437	21.2	385.76	11.12	23.0
270	2.4699	4	437	21.2	388.69	15.03	18.4
272	2.3460	4	437	21.2	262.76	17.31	15.6
274	2.1107	4	437	21.2	394.67	16.96	18.1
276	1.9669	4	437	21.2	378.25	16.90	17.4
278	1.8498	4	437	21.2	394.08	14.59	17.1
280	1.6686	4	437	21.2	392.04	21.32	13.3
282	1.6687	4	437	21.2	396.90	18.46	17.8
284	1.6119	4	437	21.2	388.08	24.16	14.0
286	1.4394	4	437	21.2	396.90	34.41	14.4
288	1.3216	5	403	14.7	396.90	26.82	13.4
290	1.4118	5	403	14.7	396.90	26.42	15.6
292	1.3459	5	403	14.7	396.90	29.29	11.8
294	1.4191	5	403	14.7	172.91	27.80	13.8
296	1.5166	5	403	14.7	169.27	16.65	15.6
298	1.4608	5	403	14.7	391.71	29.53	14.6
300	1.5296	5	403	14.7	356.99	28.32	17.8
302	1.5257	5	403	14.7	351.85	21.45	15.4
304	1.6180	5	403	14.7	372.80	14.10	21.5
306	1.5916	5	403	14.7	341.60	13.28	19.6
308	1.6102	5	403	14.7	343.28	12.12	15.3
310	1.6232	5	403	14.7	261.95	15.79	19.4
312	1.7494	5	403	14.7	321.02	15.12	17.0
314	1.7455	5	403	14.7	88.01	15.02	15.6
316	1.7364	5	403	14.7	88.63	16.14	13.1
318	1.8773	5	403	14.7	363.43	4.59	41.3
320	1.7573	5	403	14.7	353.89	6.43	24.3
322	1.7659	5	403	14.7	364.31	7.39	23.3
324	1.7984	5	403	14.7	338.92	5.50	27.0
326	1.9709	5	403	14.7	374.43	1.73	50.0

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
328	2.0407	5	403	14.7	389.61	1.92	50.0
330	2.1620	5	403	14.7	388.45	3.32	50.0
332	2.4220	5	403	14.7	395.11	11.64	22.7
334	2.2834	5	403	14.7	240.16	9.81	25.0
336	2.0459	5	403	14.7	369.30	3.70	50.0
338	2.4259	5	403	14.7	227.61	12.14	23.8
340	2.1000	5	403	14.7	297.09	11.10	23.8
342	2.2625	5	403	14.7	330.04	11.32	22.3
344	2.4259	5	403	14.7	292.29	14.43	17.4
346	2.3887	5	403	14.7	348.13	12.03	19.1
348	2.5961	5	296	16.6	396.90	14.69	23.1
350	2.6463	5	296	16.6	395.50	9.04	23.6
352	2.7019	5	296	16.6	393.23	9.64	22.6
354	3.1323	5	296	16.6	390.96	5.33	29.4
356	3.5549	5	296	16.6	393.23	10.11	23.2
358	3.3175	5	296	16.6	395.60	6.29	24.6
360	2.9153	5	296	16.6	391.27	6.92	29.9
362	2.8290	3	193	17.8	396.90	5.04	37.2
364	2.7410	3	193	17.8	395.56	7.56	39.8
366	2.5979	3	193	17.8	396.90	9.45	36.2
368	2.7006	3	193	17.8	394.12	4.82	37.9
370	2.8470	3	193	17.8	396.90	5.68	32.5
372	2.9879	3	193	17.8	391.00	13.98	26.4
374	3.2797	3	193	17.8	387.11	13.15	29.6
376	3.1992	3	193	17.8	392.63	4.45	50.0
378	3.7886	5	398	15.2	393.87	6.68	32.0
380	4.5667	5	398	15.2	382.84	4.56	29.8
382	4.5667	5	398	15.2	396.90	5.39	34.9
384	6.4798	5	398	15.2	377.68	5.10	37.0
386	6.4798	5	398	15.2	389.71	4.69	30.5
388	6.4798	5	398	15.2	390.49	2.87	36.4
390	6.2196	1	265	15.6	393.37	5.03	31.1
392	6.2196	1	265	15.6	376.70	4.38	29.1
394	5.6484	4	255	14.4	394.23	2.97	50.0
396	7.3090	2	329	12.6	396.90	4.08	33.3
398	7.3090	2	329	12.6	354.31	8.61	30.3
400	7.3090	2	329	12.6	392.20	6.62	34.6
402	7.6534	3	402	17.0	396.90	4.56	34.9
404	7.6534	3	402	17.0	384.30	4.45	32.9
406	6.2700	2	348	14.7	393.77	7.43	24.1
408	6.2700	2	348	14.7	395.38	3.11	42.3
410	5.1180	4	224	14.7	392.78	3.81	48.5
412	5.1180	4	224	14.7	390.55	2.88	50.0
414	3.9454	4	277	18.6	396.90	10.87	22.6
416	4.3549	4	277	18.6	394.87	10.97	24.4
418	4.3549	4	277	18.6	389.43	18.06	22.5
420	4.2392	4	277	18.6	381.32	14.66	24.4
422	3.8750	4	277	18.6	396.90	23.09	20.0
424	3.8771	4	277	18.6	393.25	17.27	21.7
426	3.6650	4	277	18.6	395.24	23.98	19.3
428	3.6526	4	277	18.6	390.94	16.03	22.4
430	3.9454	4	277	18.6	385.81	9.38	28.1

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
432	3.5875	4	277	18.6	348.93	29.55	23.7
434	3.9454	4	277	18.6	393.63	9.47	25.0
436	3.1121	5	276	16.4	392.80	13.51	23.3
438	3.4211	5	276	16.4	392.78	9.69	28.7
440	2.8893	5	276	16.4	396.90	17.92	21.5
442	3.3633	5	276	16.4	393.74	10.50	23.0
444	2.8617	8	307	17.4	391.70	9.71	26.7
446	3.0480	8	307	17.4	395.24	21.46	21.7
448	3.2721	8	307	17.4	390.39	9.93	27.5
450	3.2721	8	307	17.4	396.90	7.60	30.1
452	2.8944	8	307	17.4	385.05	4.14	44.8
454	2.8944	8	307	17.4	382.00	4.63	50.0
456	3.2157	8	307	17.4	387.38	3.13	37.6
458	3.2157	8	307	17.4	372.08	6.36	31.6
460	3.3751	8	307	17.4	377.51	3.92	46.7
462	3.3751	8	307	17.4	380.34	3.76	31.5
464	3.6715	8	307	17.4	378.35	11.65	24.3
466	3.6715	8	307	17.4	376.14	5.25	31.7
468	3.8384	8	307	17.4	385.91	2.47	41.7
470	3.6519	8	307	17.4	378.95	3.95	48.3
472	3.6519	8	307	17.4	360.20	8.05	29.0
474	3.6519	8	307	17.4	376.75	10.88	24.0
476	4.1480	8	307	17.4	388.45	9.54	25.1
478	4.1480	8	307	17.4	390.07	4.73	31.5
480	6.1899	6	300	16.6	379.41	6.36	23.7
482	6.1899	6	300	16.6	383.78	7.37	23.3
484	6.3361	6	300	16.6	391.25	11.38	22.0
486	6.3361	6	300	16.6	394.62	12.40	20.1
488	7.0355	6	300	16.6	372.75	11.22	22.2
490	7.0355	6	300	16.6	374.71	5.19	23.7
492	7.9549	7	330	19.1	372.49	12.50	17.6
494	7.9549	7	330	19.1	389.13	18.46	18.5
496	8.0555	7	330	19.1	390.18	9.16	24.3
498	8.0555	7	330	19.1	376.14	10.15	20.5
500	7.8265	7	330	19.1	374.71	9.52	24.5
502	7.8265	7	330	19.1	393.74	6.56	26.2
504	7.3967	7	330	19.1	396.28	5.90	24.4
506	7.3967	7	330	19.1	377.07	3.59	24.8
508	8.9067	7	330	19.1	386.09	3.53	29.6
510	8.9067	7	330	19.1	396.90	3.54	42.8
512	9.2203	1	315	16.4	392.89	6.57	21.9
514	9.2203	1	315	16.4	395.18	9.25	20.9
516	6.3361	3	244	15.9	386.34	3.11	44.0
518	1.8010	5	264	13.0	389.70	5.12	50.0
520	1.8946	5	264	13.0	383.29	7.79	36.0
522	2.0107	5	264	13.0	391.93	6.90	30.1
524	2.1121	5	264	13.0	392.80	9.59	33.8
526	2.1398	5	264	13.0	388.37	7.26	43.1
528	2.2885	5	264	13.0	386.86	5.91	48.8
530	2.0788	5	264	13.0	393.42	11.25	31.0
532	1.9301	5	264	13.0	387.89	8.10	36.5
534	1.9865	5	264	13.0	392.40	10.45	22.8

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
536	2.1329	5	264	13.0	384.07	14.79	30.7
538	2.4216	5	264	13.0	384.54	7.44	50.0
540	2.8720	5	264	13.0	390.30	3.16	43.5
542	3.9175	3	223	18.6	391.34	13.65	20.7
544	4.4290	3	223	18.6	388.65	13.00	21.1
546	4.4290	3	223	18.6	396.90	6.59	25.2
548	3.9175	3	223	18.6	394.96	7.73	24.4
550	4.3665	3	223	18.6	390.77	6.58	35.2
552	4.0776	4	254	17.6	396.90	3.53	32.4
554	4.2673	4	254	17.6	396.90	2.98	32.0
556	4.7872	4	254	17.6	389.25	6.05	33.2
558	4.8628	4	254	17.6	393.45	4.16	33.1
560	4.1403	4	254	17.6	396.90	7.19	29.1
562	4.1007	5	216	14.9	396.90	4.85	35.1
564	4.6947	5	216	14.9	387.31	3.76	45.4
566	5.2447	5	216	14.9	392.23	4.59	35.4
568	5.2119	5	216	14.9	377.07	3.01	46.0
570	5.8850	1	198	13.6	395.52	3.16	50.0
572	7.3073	1	285	15.3	394.72	7.85	32.2
574	7.3073	1	300	15.3	394.72	8.23	22.0
576	9.0892	1	241	18.2	341.60	12.93	20.1
578	7.3172	6	293	16.6	396.90	7.14	23.2
580	7.3172	6	293	16.6	396.90	7.60	22.3
582	7.3172	6	293	16.6	371.72	9.51	24.8
584	5.1167	4	245	19.2	396.90	3.33	28.5
586	5.1167	4	245	19.2	396.90	3.56	37.3
588	5.1167	4	245	19.2	396.90	4.70	27.9
590	5.5027	4	289	16.0	396.90	8.58	23.9
592	5.5027	4	289	16.0	396.90	10.40	21.7
594	5.9604	4	289	16.0	396.90	6.27	28.6
596	5.9604	4	289	16.0	392.85	7.39	27.1
598	6.3200	4	289	16.0	396.90	15.84	20.3
600	7.8278	5	358	14.8	368.24	4.97	22.5
602	7.8278	5	358	14.8	371.58	4.74	29.0
604	7.8278	5	358	14.8	390.86	6.07	24.8
606	5.4917	7	329	16.1	395.75	9.50	22.0
608	5.4917	7	329	16.1	383.61	8.67	26.4
610	5.4917	7	329	16.1	390.43	4.86	33.1
612	4.0220	7	222	18.4	393.68	6.93	36.1
614	3.3700	7	222	18.4	393.36	8.93	28.4
616	3.0992	7	222	18.4	396.90	6.47	33.4
618	3.1827	7	222	18.4	396.90	7.53	28.2
620	3.3175	4	304	18.4	396.90	4.54	22.8
622	3.1025	4	304	18.4	396.24	9.97	20.3
624	2.5194	4	304	18.4	350.45	12.64	16.1
626	2.6403	4	304	18.4	396.90	5.98	22.1
628	2.8340	4	304	18.4	396.30	11.72	19.4
630	3.2628	4	304	18.4	393.39	7.90	21.6
632	3.6023	4	304	18.4	395.69	9.28	23.8
634	3.9450	4	304	18.4	396.42	11.50	16.2
636	3.9986	4	304	18.4	390.70	18.33	17.8
638	4.0317	4	304	18.4	396.90	15.94	19.8

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
640	3.5325	4	304	18.4	395.21	10.36	23.1
642	4.0019	4	304	18.4	396.23	12.73	21.0
644	4.5404	5	287	19.6	396.90	7.20	23.8
646	4.5404	5	287	19.6	396.90	6.87	23.1
648	4.7211	5	287	19.6	396.90	7.70	20.4
650	4.7211	5	287	19.6	391.13	11.74	18.5
652	4.7211	5	287	19.6	396.90	6.12	25.0
654	5.4159	5	287	19.6	393.68	5.08	24.6
656	5.4159	5	287	19.6	396.90	6.15	23.0
658	5.4159	5	287	19.6	396.90	12.79	22.2
660	5.2146	4	430	16.9	382.44	9.97	19.3
662	5.2146	4	430	16.9	375.21	7.34	22.6
664	5.8736	4	430	16.9	368.57	9.09	19.8
666	6.6407	1	304	16.9	394.02	12.43	17.1
668	6.6407	1	304	16.9	362.25	7.83	19.4
670	6.4584	5	224	20.2	389.71	5.68	22.2
672	6.4584	5	224	20.2	389.40	6.75	20.7
674	5.9853	5	224	20.2	396.90	8.01	21.1
676	5.2311	5	224	20.2	396.90	9.80	19.5
678	5.6150	5	224	20.2	394.81	10.56	18.5
680	4.8122	5	224	20.2	396.14	8.51	20.6
682	4.8122	5	224	20.2	396.90	9.74	19.0
684	4.8122	5	224	20.2	396.90	9.29	18.7
686	7.0379	1	284	15.5	394.74	5.49	32.7
688	6.2669	1	422	15.9	389.96	8.65	16.5
690	5.7321	5	370	17.6	396.90	7.18	23.9
692	6.4654	5	370	17.6	387.97	4.61	31.2
694	8.0136	3	352	18.8	385.64	10.53	17.5
696	8.0136	3	352	18.8	364.61	12.67	17.2
698	8.5353	4	351	17.9	392.43	6.36	23.1
700	8.3440	4	280	17.0	390.94	5.99	24.5
702	8.7921	1	335	19.7	389.85	5.89	26.6
704	8.7921	1	335	19.7	396.90	5.98	22.9
706	10.7103	4	411	18.3	370.78	5.49	24.1
708	10.7103	4	411	18.3	392.33	7.79	18.6
710	12.1265	5	187	17.0	384.46	4.50	30.1
712	10.5857	4	334	22.0	382.80	8.05	18.2
714	10.5857	4	334	22.0	376.04	5.57	20.6
716	2.1222	24	666	20.2	377.73	17.60	17.8
718	2.5052	24	666	20.2	391.34	13.27	21.7
720	2.7227	24	666	20.2	395.43	11.48	22.7
722	2.5091	24	666	20.2	390.74	12.67	22.6
724	2.5182	24	666	20.2	374.56	7.79	25.0
726	2.2955	24	666	20.2	350.65	14.19	19.9
728	2.1036	24	666	20.2	380.79	10.19	20.8
730	1.9047	24	666	20.2	353.04	14.64	16.8
732	1.9047	24	666	20.2	354.55	5.29	21.9
734	1.6132	24	666	20.2	354.70	7.12	27.5
736	1.7523	24	666	20.2	316.03	14.00	21.9
738	1.5106	24	666	20.2	131.42	13.33	23.1
740	1.3325	24	666	20.2	375.52	3.26	50.0
742	1.3567	24	666	20.2	375.33	3.73	50.0

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
744	1.2024	24	666	20.2	392.05	2.96	50.0
746	1.1691	24	666	20.2	366.15	9.53	50.0
748	1.1296	24	666	20.2	347.88	8.88	50.0
750	1.1742	24	666	20.2	396.90	34.77	13.8
752	1.1370	24	666	20.2	396.90	37.97	13.8
754	1.3163	24	666	20.2	396.90	13.44	15.0
756	1.3449	24	666	20.2	363.02	23.24	13.9
758	1.3580	24	666	20.2	396.90	21.24	13.3
760	1.3861	24	666	20.2	396.90	23.69	13.1
762	1.3861	24	666	20.2	393.74	21.78	10.2
764	1.4165	24	666	20.2	396.90	17.21	10.4
766	1.5192	24	666	20.2	396.90	21.08	10.9
768	1.5804	24	666	20.2	396.90	23.60	11.3
770	1.5331	24	666	20.2	396.90	24.56	12.3
772	1.4395	24	666	20.2	285.83	30.63	8.8
774	1.4261	24	666	20.2	396.90	30.81	7.2
776	1.4672	24	666	20.2	396.90	28.28	10.5
778	1.5184	24	666	20.2	396.90	31.99	7.4
780	1.5895	24	666	20.2	372.92	30.62	10.2
782	1.7281	24	666	20.2	396.90	20.85	11.5
784	1.9265	24	666	20.2	394.43	17.11	15.1
786	2.1678	24	666	20.2	378.38	18.76	23.2
788	1.7700	24	666	20.2	396.90	25.68	9.7
790	1.7912	24	666	20.2	396.90	15.17	13.8
792	1.7821	24	666	20.2	396.90	16.35	12.7
794	1.7257	24	666	20.2	391.98	17.12	13.1
796	1.6768	24	666	20.2	396.90	19.37	12.5
798	1.6334	24	666	20.2	393.10	19.92	8.5
800	1.4896	24	666	20.2	396.90	30.59	5.0
802	1.5004	24	666	20.2	338.16	29.97	6.3
804	1.5888	24	666	20.2	396.90	26.77	5.6
806	1.5741	24	666	20.2	396.90	20.32	7.2
808	1.6390	24	666	20.2	376.11	20.31	12.1
810	1.7028	24	666	20.2	396.90	19.77	8.3
812	1.6074	24	666	20.2	329.46	27.38	8.5
814	1.4254	24	666	20.2	384.97	22.98	5.0
816	1.1781	24	666	20.2	370.22	23.34	11.9
818	1.2852	24	666	20.2	332.09	12.13	27.9
820	1.4547	24	666	20.2	314.64	26.40	17.2
822	1.4655	24	666	20.2	179.36	19.78	27.5
824	1.4130	24	666	20.2	2.60	10.11	15.0
826	1.5275	24	666	20.2	35.05	21.22	17.2
828	1.5539	24	666	20.2	28.79	34.37	17.9
830	1.5894	24	666	20.2	210.97	20.08	16.3
832	1.6582	24	666	20.2	88.27	36.98	7.0
834	1.8347	24	666	20.2	27.25	29.05	7.2
836	1.8195	24	666	20.2	21.57	25.79	7.5
838	1.6475	24	666	20.2	127.36	26.64	10.4
840	1.8026	24	666	20.2	16.45	20.62	8.8
842	1.7940	24	666	20.2	48.45	22.74	8.4
844	1.8589	24	666	20.2	318.75	15.02	16.7
846	1.8746	24	666	20.2	319.98	15.70	14.2

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
848	1.9512	24	666	20.2	291.55	14.10	20.8
850	2.0218	24	666	20.2	2.52	23.29	13.4
852	2.0635	24	666	20.2	3.65	17.16	11.7
854	1.9096	24	666	20.2	7.68	24.39	8.3
856	1.9976	24	666	20.2	24.65	15.69	10.2
858	1.8629	24	666	20.2	18.82	14.52	10.9
860	1.9356	24	666	20.2	96.73	21.52	11.0
862	1.9682	24	666	20.2	60.72	24.08	9.5
864	2.0527	24	666	20.2	83.45	17.64	14.5
866	2.0882	24	666	20.2	81.33	19.69	14.1
868	2.2004	24	666	20.2	97.95	12.03	16.1
870	2.3158	24	666	20.2	100.19	16.22	14.3
872	2.2222	24	666	20.2	100.63	15.17	11.7
874	2.1247	24	666	20.2	109.85	23.27	13.4
876	2.0026	24	666	20.2	27.49	18.05	9.6
878	1.9142	24	666	20.2	9.32	26.45	8.7
880	1.8206	24	666	20.2	68.95	34.02	8.4
882	1.8172	24	666	20.2	396.90	22.88	12.8
884	1.8662	24	666	20.2	391.45	22.11	10.5
886	2.0651	24	666	20.2	385.96	19.52	17.1
888	2.0048	24	666	20.2	395.69	16.59	18.4
890	1.9784	24	666	20.2	386.73	18.85	15.4
892	1.8956	24	666	20.2	240.52	23.79	10.8
894	1.9879	24	666	20.2	43.06	23.98	11.8
896	2.0720	24	666	20.2	318.01	17.79	14.9
898	2.1980	24	666	20.2	388.52	16.44	12.6
900	2.2616	24	666	20.2	396.90	18.13	14.1
902	2.1850	24	666	20.2	304.21	19.31	13.0
904	2.3236	24	666	20.2	0.32	17.44	13.4
906	2.3552	24	666	20.2	355.29	17.73	15.2
908	2.3682	24	666	20.2	385.09	17.27	16.1
910	2.4527	24	666	20.2	375.87	16.74	17.8
912	2.4961	24	666	20.2	6.68	18.71	14.9
914	2.4358	24	666	20.2	50.92	18.13	14.1
916	2.5806	24	666	20.2	10.48	19.01	12.7
918	2.7792	24	666	20.2	3.50	16.94	13.5
920	2.7831	24	666	20.2	272.21	16.23	14.9
922	2.7175	24	666	20.2	396.90	14.70	20.0
924	2.5975	24	666	20.2	255.23	16.42	16.4
926	2.5671	24	666	20.2	391.43	14.65	17.7
928	2.7344	24	666	20.2	396.90	13.99	19.5
930	2.8016	24	666	20.2	393.82	10.29	20.2
932	2.9634	24	666	20.2	396.90	13.22	21.4
934	3.0665	24	666	20.2	334.40	14.13	19.9
936	2.8715	24	666	20.2	22.01	17.15	19.0
938	2.5403	24	666	20.2	331.29	21.32	19.1
940	2.9084	24	666	20.2	368.74	18.13	19.1
942	2.8237	24	666	20.2	396.90	14.76	20.1
944	3.0334	24	666	20.2	396.90	16.29	19.9
946	3.0993	24	666	20.2	395.33	12.87	19.6
948	2.8965	24	666	20.2	393.37	14.36	23.2
950	2.5329	24	666	20.2	374.68	11.66	29.8

	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
952	2.4298	24	666	20.2	352.58	18.14	13.8
954	2.2060	24	666	20.2	302.76	24.10	13.3
956	2.3053	24	666	20.2	396.21	18.68	16.7
958	2.1007	24	666	20.2	349.48	24.91	12.0
960	2.1705	24	666	20.2	379.70	18.03	14.6
962	1.9512	24	666	20.2	383.32	13.11	21.4
964	3.4242	24	666	20.2	396.90	10.74	23.0
966	3.3317	24	666	20.2	393.07	7.74	23.7
968	3.4106	24	666	20.2	395.28	7.01	25.0
970	4.0983	24	666	20.2	392.92	10.42	21.8
972	3.7240	24	666	20.2	370.73	13.34	20.6
974	3.9917	24	666	20.2	388.62	10.58	21.2
976	3.5459	24	666	20.2	392.68	14.98	19.1
978	3.1523	24	666	20.2	388.22	11.45	20.6
980	1.8209	4	711	20.1	395.09	18.06	15.2
982	1.7554	4	711	20.1	344.05	23.97	7.0
984	1.8226	4	711	20.1	318.43	29.68	8.1
986	1.8681	4	711	20.1	390.11	18.07	13.6
988	2.1099	4	711	20.1	396.90	13.35	20.1
990	2.3817	6	391	19.2	396.90	12.01	21.8
992	2.3817	6	391	19.2	396.90	13.59	24.5
994	2.7986	6	391	19.2	393.29	17.60	23.1
996	2.7986	6	391	19.2	396.90	21.14	19.7
998	2.8927	6	391	19.2	396.90	14.10	18.3
1000	2.4091	6	391	19.2	396.90	12.92	21.2
1002	2.3999	6	391	19.2	395.77	15.10	17.5
1004	2.4982	6	391	19.2	396.90	14.33	16.8
1006	2.4786	1	273	21.0	391.99	9.67	22.4
1008	2.2875	1	273	21.0	396.90	9.08	20.6
1010	2.1675	1	273	21.0	396.90	5.64	23.9
1012	2.3889	1	273	21.0	393.45	6.48	22.0
1014	2.5050	1	273	21.0	396.90	7.88	11.9

Reference

- David Harrison Jr, Daniel L Rubinfeld. 1978a. “Hedonic Housing Prices and the Demand for Clean Air.” *Journal of Environment, Economics & Management* 5: 81–102.
- . 1978b. “The Boston House-Price Data of Harrison, d. And Rubinfeld, d.l. ‘Hedonic Prices and the Demand for Clean Air’” *Journal of Environment, Economics & Management*. Vol. 5. <http://lib.stat.cmu.edu/datasets/boston>.
- Firke, Sam. 2021. *Janitor: Simple Tools for Examining and Cleaning Dirty Data*. <https://CRAN.R-project.org/package=janitor>.
- R Core Team. 2021. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Grolemond, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.
- Wickham, Hadley, and Jennifer Bryan. 2019. *Readxl: Read Excel Files*. <https://CRAN.R-project.org/package=readxl>.
- Wickham, Hadley, Romain François, Lionel Henry, and Kirill Müller. 2021. *Dplyr: A Grammar of Data Manipulation*. <https://CRAN.R-project.org/package=dplyr>.