

# 10.2강 여러개의 변수 : 모델의 실체

## Boston Housing Price

$$\begin{aligned}
 y = & -0.09832x_1 \\
 & + 0.088935934x_2 \\
 & + -0.060747888x_3 \\
 & + 4.444701x_4 \\
 & + 0.95923173x_5 \\
 & + 3.4496038x_6 \\
 & + 0.03198209x_7 \\
 & + -0.8730943x_8 \\
 & + 0.17615545x_9 \\
 & + -0.00806713x_{10} \\
 & + 0.14275435x_{11} \\
 & + 0.017301293x_{12} \\
 & + -0.6197083x_{13} \\
 & + 2.08366
 \end{aligned}$$

1	2	3	4	5	6	7	8	9	10	11	12	13	14
CRIM	ZN	INDUS	CHAS	NOX	RM	AGE	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
0.00632	18	2.31	0	0.538	6.575	65.2	4.09	1	296	15.3	396.9	4.98	24
0.02731	0	7.07	0	0.469	6.421	78.9	4.9671	2	242	17.8	396.9	9.14	21.6
0.02729	0	7.07	0	0.469	7.185	61.1	4.9671	2	242	17.8	392.83	4.03	34.7
0.03237	0	2.18	0	0.458	6.998	45.8	6.0622	3	222	18.7	394.63	2.94	33.4
0.06905	0	2.18	0	0.458	7.147	54.2	6.0622	3	222	18.7	396.9	5.33	36.2
0.02985	0	2.18	0	0.458	6.43	58.7	6.0622	3	222	18.7	394.12	5.21	28.7
0.08829	12.5	7.87	0	0.524	6.012	66.6	5.5605	5	311	15.2	395.6	12.43	22.9
0.14455	12.5	7.87	0	0.524	6.172	96.1	5.9505	5	311	15.2	396.9	19.15	27.1
1.23247	0	8.14	0	0.538	6.142	91.7	3.9769	4	307	21	396.9	18.72	15.2
0.17004	12.5	7.87	0	0.524	6.004	85.9	6.5921	5	311	15.2	386.71	17.1	18.9
0.22489	12.5	7.87	0	0.524	6.377	94.3	6.3467	5	311	15.2	392.52	20.45	15
8.98296	0	18.1	1	0.77	6.212	97.4	2.1222	24	666	20.2	377.73	17.6	17.8

학습을 시켰을 때

## Boston Housing Price

$$\begin{aligned}
 19.13 = & -0.09832 \times 1.23247 \\
 & + 0.088935934 \times 0 \\
 & + -0.060747888 \times 8.14 \\
 & + 4.444701 \times 0 \\
 & + 0.95923173 \times 0.538 \\
 & + 3.4496038 \times 6.142 \\
 & + 0.03198209 \times 91.7 \\
 & + -0.8730943 \times 3.9769 \\
 & + 0.17615545 \times 4 \\
 & + -0.00806713 \times 307 \\
 & + 0.14275435 \times 21 \\
 & + 0.017301293 \times 396.9 \\
 & + -0.6197083 \times 18.72 \\
 & + 2.08366
 \end{aligned}$$

1	2	3	4	5	6	7	8	9	10	11	12	13	14
CRIM	ZN	INDUS	CHAS	NOX	RM	AGE	DIS	RAD	TAX	PTRATIO	B	LSTAT	MEDV
범죄율			강변		평균 방 수	노후주택 비율			재산세 세율	학생/교사 비율		하위계층 비율	집값
0.00632	18	2.31	0	0.538	6.575	65.2	4.09	1	296	15.3	396.9	4.98	24
0.02731	0	7.07	0	0.469	6.421	78.9	4.9671	2	242	17.8	396.9	9.14	21.6
0.02729	0	7.07	0	0.469	7.185	61.1	4.9671	2	242	17.8	392.83	4.03	34.7
0.03237	0	2.18	0	0.458	6.998	45.8	6.0622	3	222	18.7	394.63	2.94	33.4
0.06905	0	2.18	0	0.458	7.147	54.2	6.0622	3	222	18.7	396.9	5.33	36.2
0.02985	0	2.18	0	0.458	6.43	58.7	6.0622	3	222	18.7	394.12	5.21	28.7
0.08829	12.5	7.87	0	0.524	6.012	66.6	5.5605	5	311	15.2	395.6	12.43	22.9
0.14455	12.5	7.87	0	0.524	6.172	96.1	5.9505	5	311	15.2	396.9	19.15	27.1
1.23247	0	8.14	0	0.538	6.142	91.7	3.9769	4	307	21	396.9	18.72	15.2
0.17004	12.5	7.87	0	0.524	6.004	85.9	6.5921	5	311	15.2	386.71	17.1	18.9
0.22489	12.5	7.87	0	0.524	6.377	94.3	6.3467	5	311	15.2	392.52	20.45	15
8.98296	0	18.1	1	0.77	6.212	97.4	2.1222	24	666	20.2	377.73	17.6	17.8

