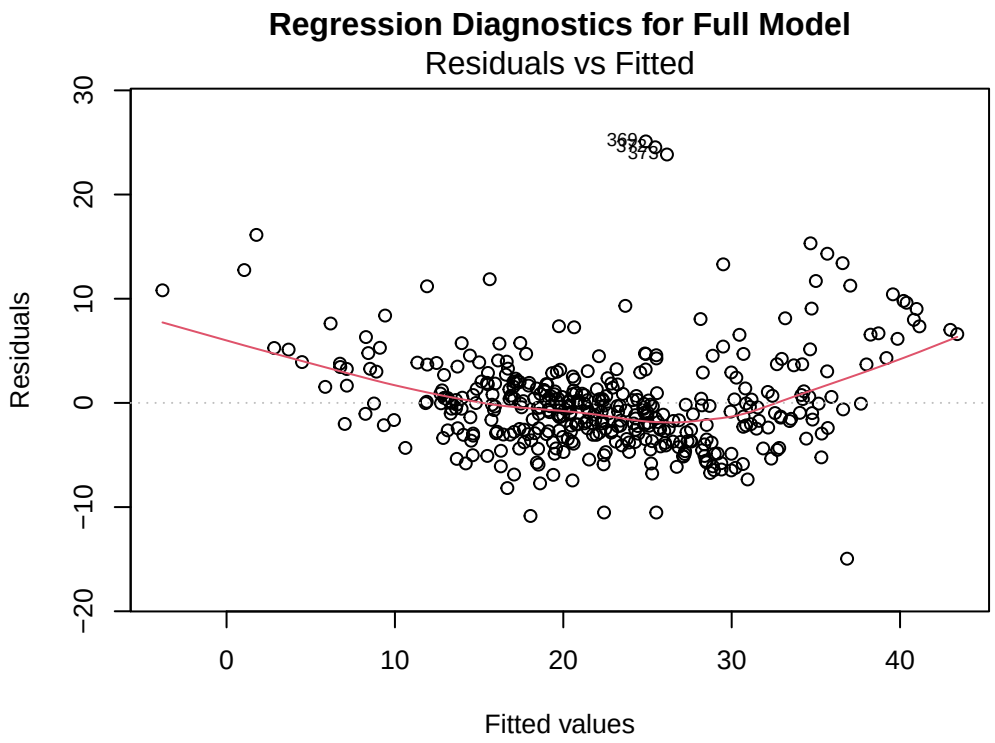
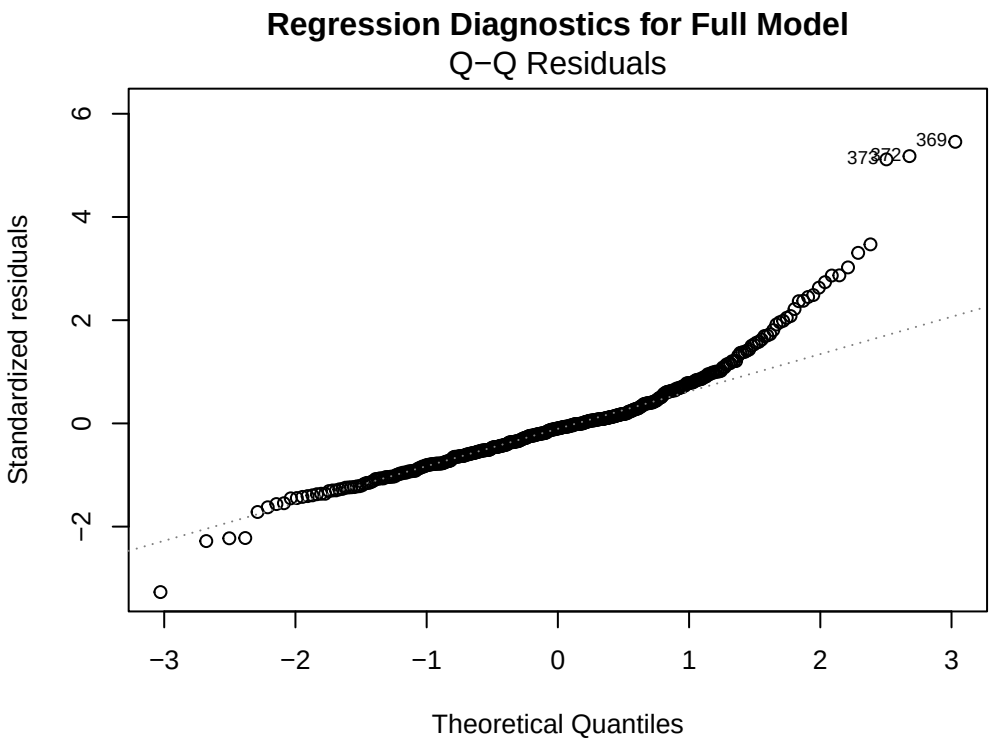
Data Split Summary

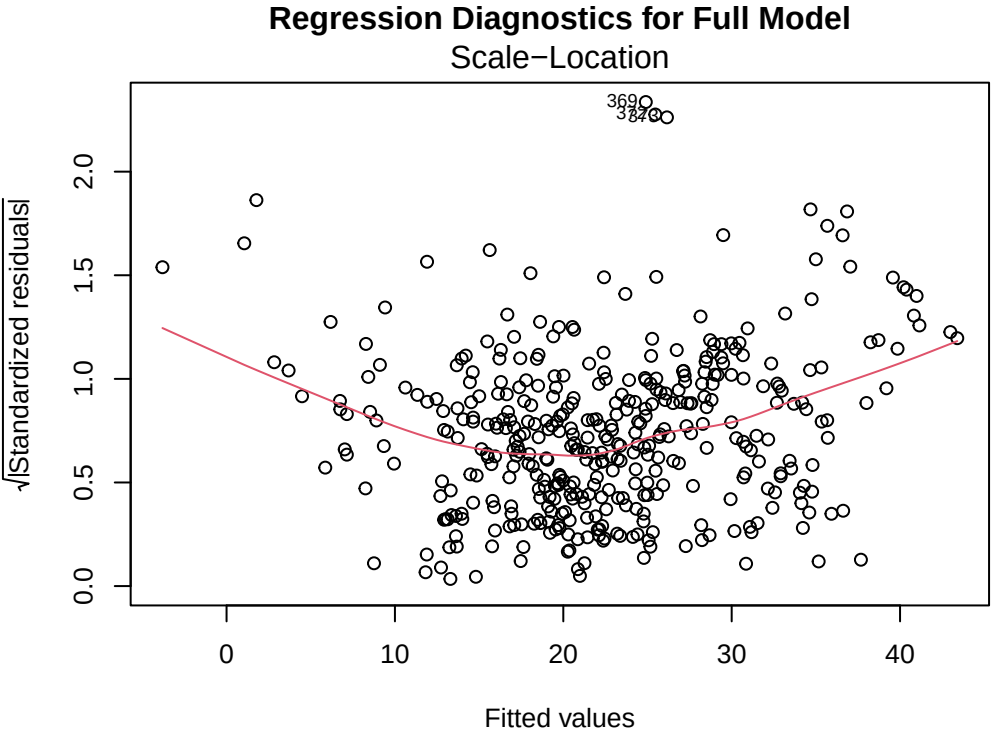
Training Set: 407 observations

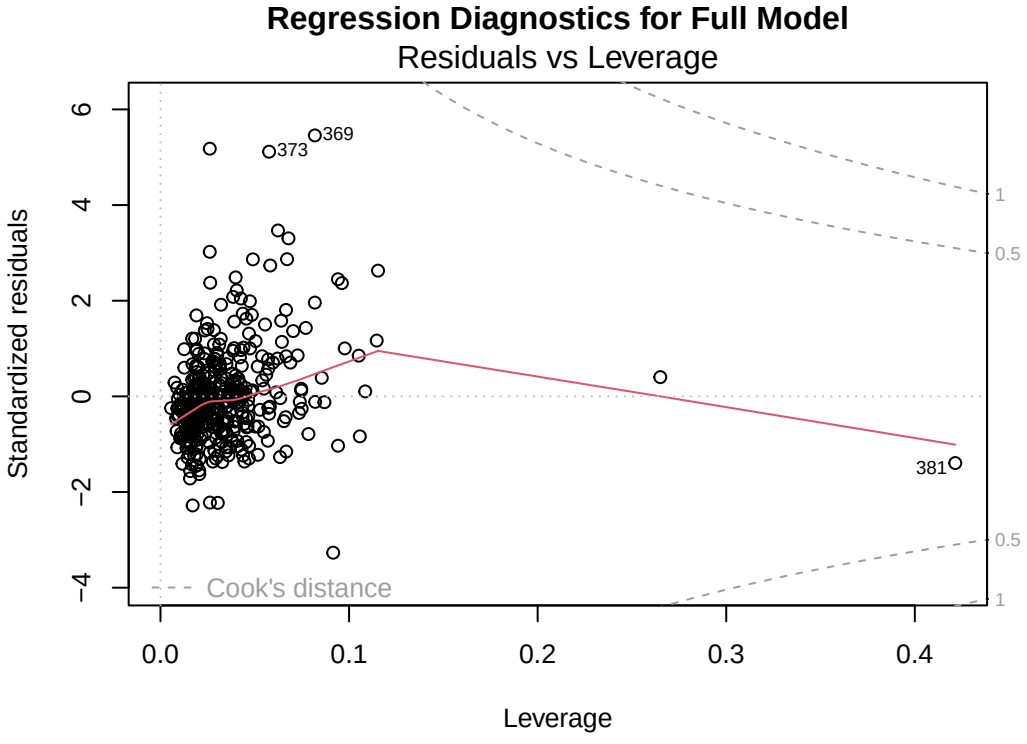
Testing Set: 99 observations

Full Model Summary


Regression Diagnostics for Full Model
Residuals vs Fitted
Residuals
Fitted values
369
373


Regression Diagnostics for Full Model
Q−Q Residuals
Standardized residuals
Theoretical Quantiles
369
373
372


Regression Diagnostics for Full Model
Scale−Location
√|Standardized residuals|
Fitted values
369
373


Regression Diagnostics for Full Model
Residuals vs Leverage
Standardized residuals
Leverage
Cook's distance
369
373
381

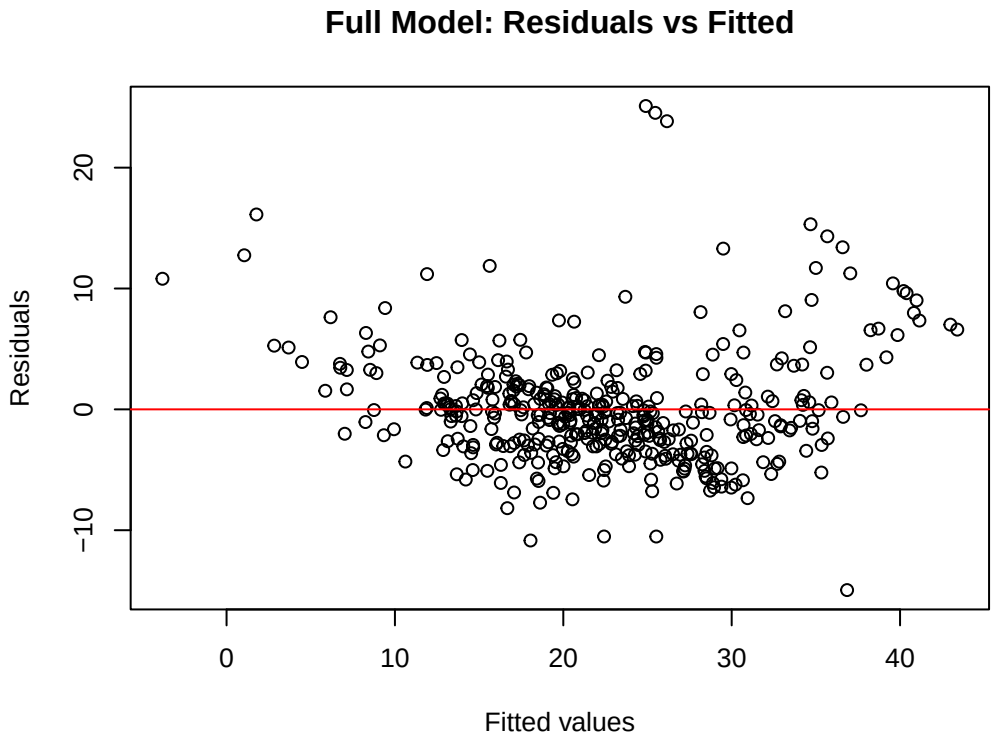
Variance Inflation Factors (VIF)

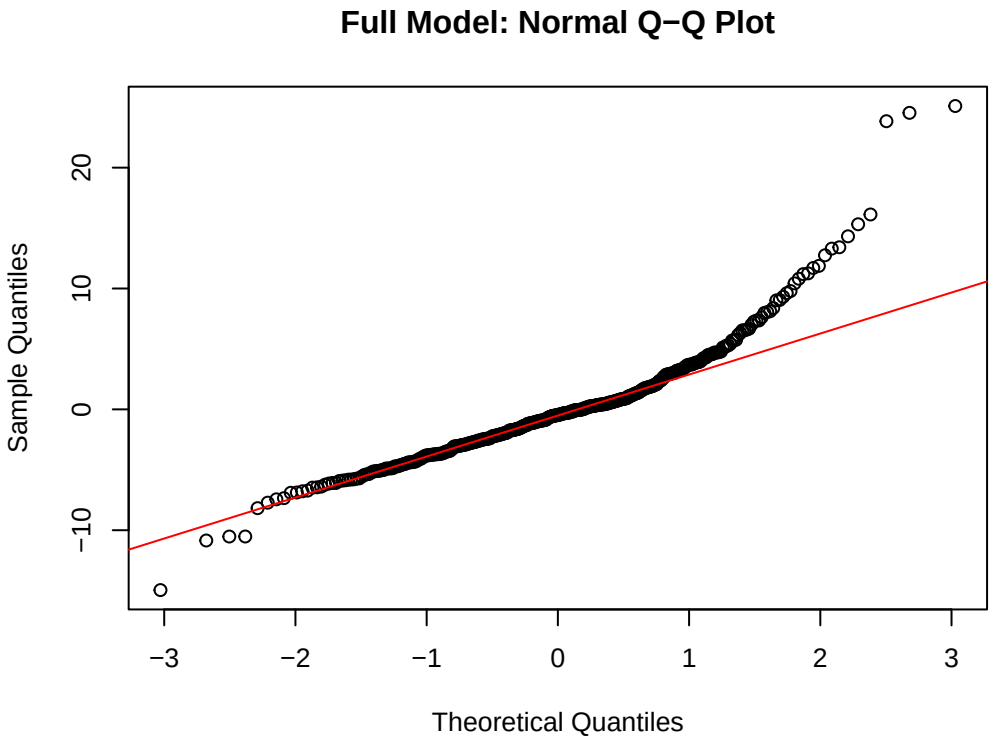
	Variable	VIF
CRIM	CRIM	1.845
ZN	ZN	2.323
INDUS	INDUS	3.956
CHAS	CHAS	1.067
NOX	NOX	4.448
RM	RM	1.912
AGE	AGE	3.214
DIS	DIS	4.065
RAD	RAD	8.153
TAX	TAX	9.660
PTRATIO	PTRATIO	1.852
B	B	1.365
LSTAT	LSTAT	3.132

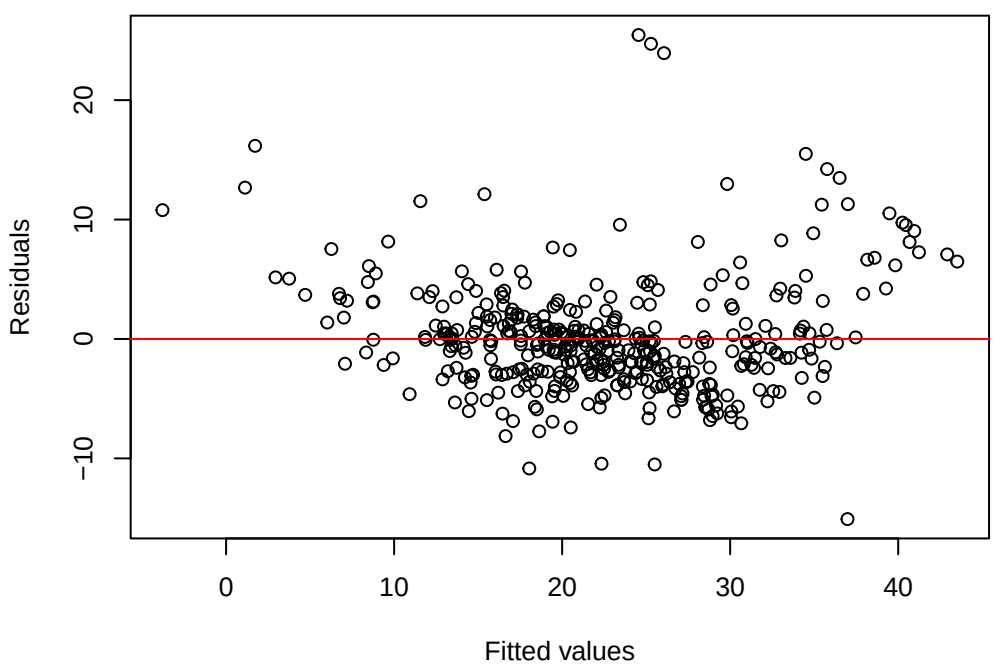
Stepwise Model Summary

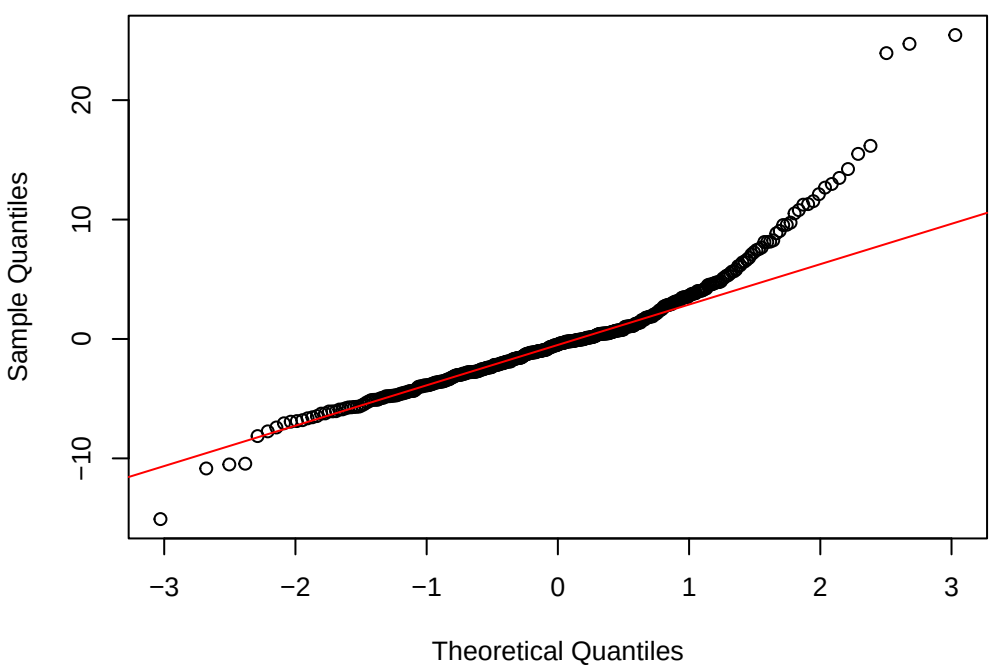
ANOVA Comparison of Models

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	393	9056.90491566888	NA	NA	NA	NA
2	395	9066.96285860686	−2	−10.0579429379777	0.218218674670348	0.804046966574337


Full Model: Residuals vs Fitted
Residuals
Fitted values
−10
0
10
20
0
10
20
30
40


Full Model: Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
−10
0
10
20
−3
−2
−1
0
1
2
3


Stepwise Model: Residuals vs Fitted
Residuals
Fitted values
−10
0
10
20
0
10
20
30
40


Stepwise Model: Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
−10
0
10
20
−3
−2
−1
0
1
2
3

Coefficient Comparison Between Models

	Variable	Full_Model	Stepwise_Model
(Intercept)	(Intercept)	37.7336	37.5179
CRIM	CRIM	−0.0939	−0.0943
ZN	ZN	0.0394	0.0386
CHAS	CHAS	2.2902	2.2892
NOX	NOX	−17.1306	−16.6519
RM	RM	3.4992	3.5695
DIS	DIS	−1.3908	−1.4259
RAD	RAD	0.3309	0.3307
TAX	TAX	−0.0124	−0.0126
PTRATIO	PTRATIO	−0.9607	−0.9579
B	B	0.0098	0.0100
LSTAT	LSTAT	−0.5621	−0.5487