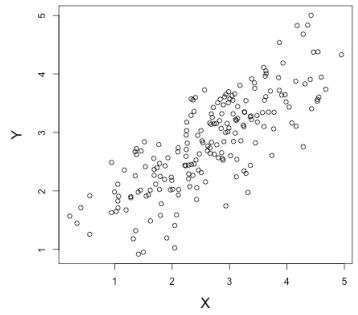
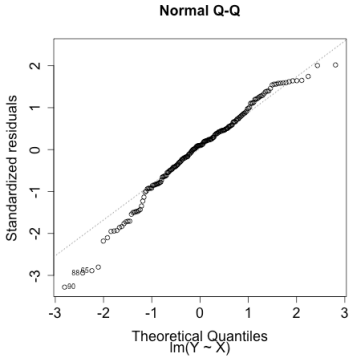
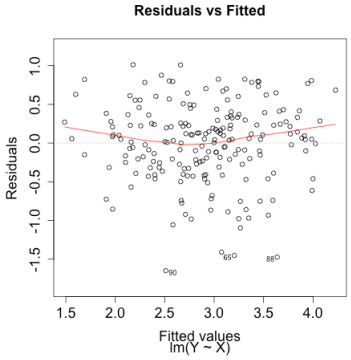
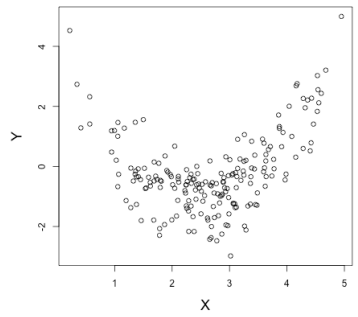
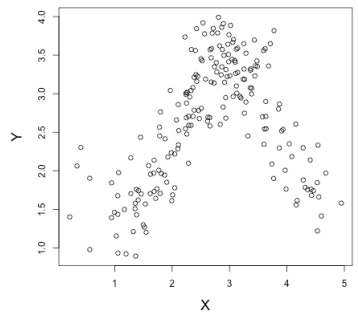
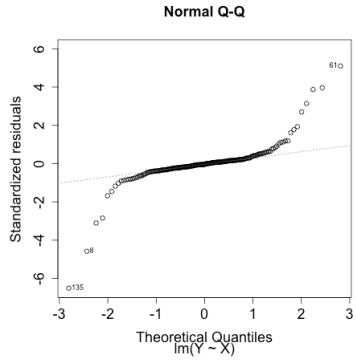
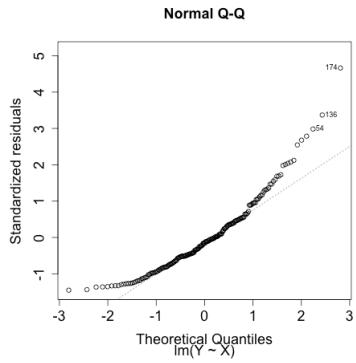
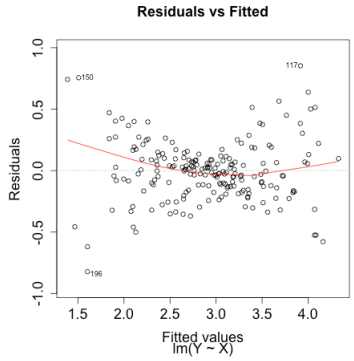
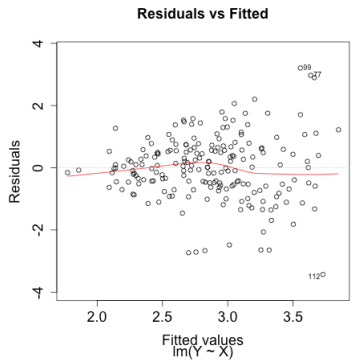
Using the diagnostic plots to check the assumptions of the linear regression

Assumption	Linearity	Normality	Constant variance
Diagnostic plot	Scatterplot	Normal Q-Q plot	Residual plot
What to check	The scatterplot should demonstrate a linear relationship between *x* and *y*.	The residuals should be approximately normally distributed, thus forming a straight diagonal line on the normal Q-Q plot.	The variation of the residuals should be approximately equal for all values of *x* (or *y*.)
Good example			
Bad examples