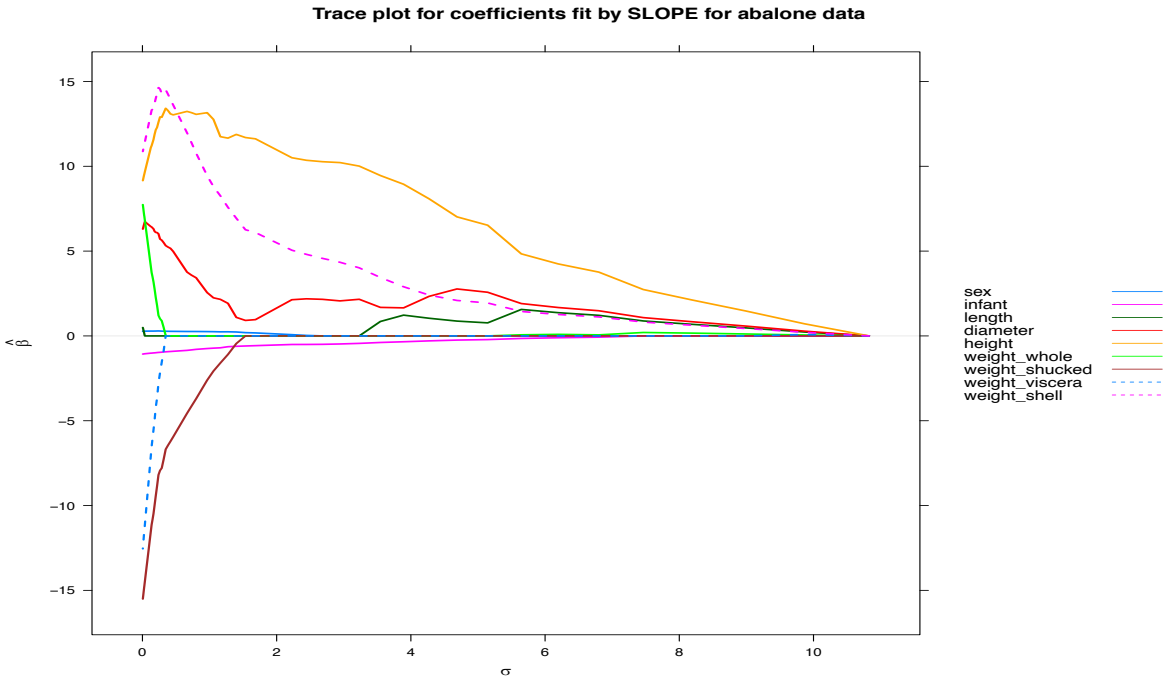

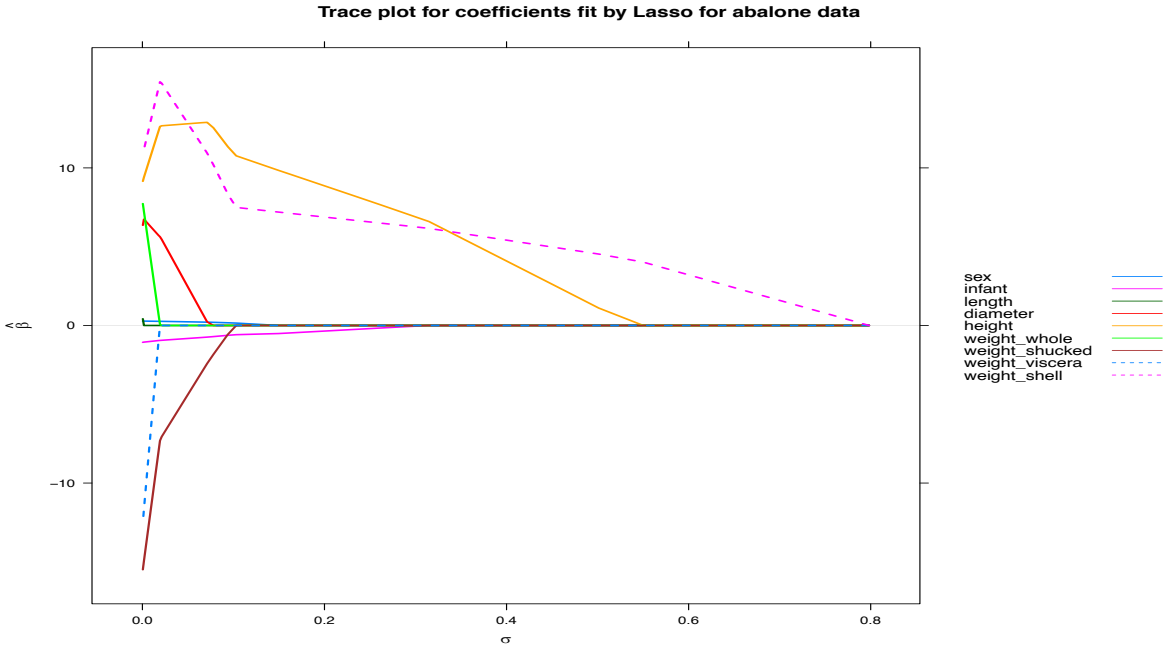

Analyzing similarities and differences of both trace plots it is clearly seen that for very small sigma both SLOPE and Lasso coefficients' solutions are really similar, which is in line with theory, because for sigma equal to 0, considered solutions for these methods are the Ordinary Least Squares ones.

As sigma increases, the regularization term has a greater effect. With the increasement of penalty, SLOPE traces of coefficients do not converge to 0 too fast, almost half of them remain nonzero with most of the values of sigma, while in Lasso trace plot most of the estimators almost immediately converge to 0, only two of them remain relevant here. The major difference between both trace plots is the fact that SLOPE method gives similar values to three coefficients for bigger sigma while with the Lasso method, only one (of these three indicated as significant by SLOPE) is nonzero for greater penalty. It could be a sign that three predicators associated with these three coefficients are strongly correlated, which in fact is, what we have checked in *easy_test_code.R*.