**Yifeng Lan yl961**

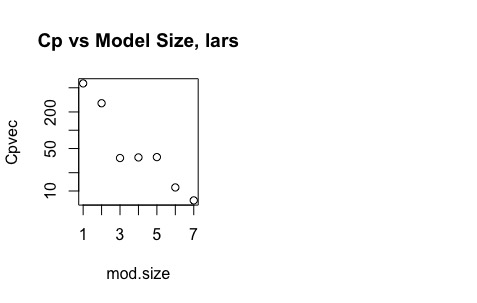
The predictions are higher than the confidence bound. The reasons could be the following:

1. Omitted Variables Bias:

Missing variables could lead to this result. Since there are more variables affect acceleration of a car, such as the “health” of clutches, car’s weight distribution, gearing, presence of differentials and so on. Therefore, more variables should be considered into the model.

1. Sample selection bias:

Sample selection induces correlation between one or more regressors and error term, leading to bias and inconsistency of the OLS estimator. For example, “cylinders” and “horsepower” are both regressors, however, these two factors have a strong correlation.

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***> boundsLeaps***

lowerbound upperbound ynew comparison

2 "8.66017419600177" "9.9167006423142" "11.5" "HIGH"

6 "6.05501469896171" "7.78359502568289" "10" "HIGH"

7 "2.77824455609251" "4.95300151900454" "9" "HIGH"

8 "3.49173052028313" "5.5297291744304" "8.5" "HIGH"

9 "2.45364809057781" "4.65444344723296" "10" "HIGH"

10 "5.42496353017986" "7.14890363222584" "8.5" "HIGH"

11 "6.63900289395975" "8.46138708354723" "10" "HIGH"

12 "9.08220676076827" "10.26289576014" "8" "LOW"

14 "-4.36814877919981" "-0.595591849182369" "10" "HIGH"

26 "6.0418658494762" "7.61583446121152" "14" "HIGH"

27 "7.56675297493975" "9.13265657341668" "15" "HIGH"

28 "6.14354735977864" "7.82534710671427" "13.5" "HIGH"

29 "10.0384927283112" "11.7218173532881" "18.5" "HIGH"

39 "11.0286786195079" "11.9292069425838" "12" "HIGH"

40 "10.1272793001551" "11.2793973878857" "11.5" "HIGH"

43 "11.8699251025256" "12.994623671402" "11.5" "LOW"

44 "12.0674893109952" "13.1020028376307" "12" "LOW"

45 "13.0865558856431" "14.2648792700117" "12" "LOW"

63 "11.2623157257674" "12.1015120394764" "12" "TRUE"

64 "9.68990617116934" "10.8453309418339" "12" "HIGH"

68 "6.01459856177373" "7.61200114745218" "11" "HIGH"

70 "12.7125683790707" "13.5224651467776" "13.5" "TRUE"

71 "7.89227259431868" "9.18970240939116" "12.5" "HIGH"

86 "9.07863460097551" "10.1047659964685" "13" "HIGH"

91 "8.77405063268453" "10.0758572901461" "11.5" "HIGH"

93 "12.5132563853911" "13.2440931432257" "13" "TRUE"

95 "5.32653411615112" "7.04515443135654" "11" "HIGH"

96 "4.77129203502639" "6.57108401073489" "11" "HIGH"

97 "7.60946465029489" "8.87003847267416" "11" "HIGH"

105 "13.029982851216" "13.9746189552609" "12.5" "LOW"

106 "12.0863699918014" "12.9501749084559" "13" "HIGH"

107 "10.2038010023333" "11.1843882471098" "12.5" "HIGH"

117 "1.7879792792573" "3.87606953287097" "9.5" "HIGH"

125 "6.32930275503292" "7.7406341882883" "11" "HIGH"

157 "11.4390827104237" "12.4271847024184" "11.5" "TRUE"

213 "9.44814776457535" "10.519967832448" "12.1" "HIGH"

230 "7.82213297479881" "9.28845347792799" "11.1" "HIGH"

231 "9.73126688256495" "10.7488472697734" "11.4" "HIGH"

232 "7.04325525677775" "8.5110168330604" "12.2" "HIGH"

264 "8.37726490425721" "9.67889327368208" "13.4" "HIGH"

***> boundsLars***

lowerbound upperbound ynew comparison

2 "7.79712305884149" "10.4406246090014" "11.5" "HIGH"

6 "5.11085211519583" "8.43144422579942" "10" "HIGH"

7 "1.23713415079515" "5.99184285652528" "9" "HIGH"

8 "1.92731916916167" "6.43455477267144" "8.5" "HIGH"

9 "0.695697924818001" "5.61819174927264" "10" "HIGH"

10 "4.10164813447811" "8.03812145046145" "8.5" "HIGH"

11 "6.2488348959604" "9.54036553314829" "10" "HIGH"

12 "8.27317617518092" "10.7775305941488" "8" "LOW"

14 "-6.07789396466119" "2.06911842049041" "10" "HIGH"

26 "3.43626185273033" "7.27111917243359" "14" "HIGH"

27 "4.92714281528542" "8.32574198534907" "15" "HIGH"

28 "3.16647825667601" "7.2086701147371" "13.5" "HIGH"

29 "7.93364452447634" "10.1163689374827" "18.5" "HIGH"

39 "10.3469975474881" "11.8413168527796" "12" "HIGH"

40 "9.809106816212" "11.4116480585565" "11.5" "HIGH"

43 "11.2436994090625" "12.2927769868495" "11.5" "TRUE"

44 "11.9591729827672" "12.8692981314373" "12" "TRUE"

45 "12.5946079707984" "13.6347138456901" "12" "LOW"

63 "10.6598310351454" "12.0400618882033" "12" "TRUE"

64 "9.42877139371021" "11.1751394570181" "12" "HIGH"

68 "4.74316815201725" "8.11428661713812" "11" "HIGH"

70 "12.3611180786893" "13.1888536553498" "13.5" "HIGH"

71 "6.9105515702304" "9.58222252641883" "12.5" "HIGH"

86 "8.00494725638755" "10.4106746271223" "13" "HIGH"

91 "8.10204766758123" "10.136720058095" "11.5" "HIGH"

93 "12.2890820397246" "13.1355700022576" "13" "TRUE"

95 "3.97808158502968" "7.58359310513254" "11" "HIGH"

96 "3.24831024742143" "7.04255473660144" "11" "HIGH"

97 "6.61175587633081" "9.64135912459498" "11" "HIGH"

105 "12.930619220297" "13.8539091733312" "12.5" "LOW"

106 "11.5764677362607" "12.5767996349408" "13" "HIGH"

107 "9.08430836455234" "10.9373028731883" "12.5" "HIGH"

117 "-0.979705095859756" "4.67477090354318" "9.5" "HIGH"

125 "4.93887385846294" "8.67681873816606" "11" "HIGH"

157 "11.6332469644641" "12.6150279203305" "11.5" "LOW"

213 "8.47174347316743" "10.6044318028435" "12.1" "HIGH"

230 "7.66237833848947" "10.1626376747301" "11.1" "HIGH"

231 "9.19194904836623" "11.1434389373313" "11.4" "HIGH"

232 "6.38495079208105" "9.31400660047024" "12.2" "HIGH"

264 "6.46900098827284" "9.79581816861633" "13.4" "HIGH"