

REPORT OF ASSIGNMENT 2

In this assignment, For Decision Stumps I split the data set into two Regions R1 and R2 based on threshold value(s) and found out the mean of both regions and then found out the RSS and MSE. Then I found the minimum threshold value(s) and used that for test set and find out the test MSE value.

Minimum RSS for lstat for training set :

10137.12

Best S(Threshold value) for lstat :

7.3

Test MSE for lstat :

58.59286

Minimum RSS for RM for training set :

10011.64

Best S(Threshold value) for RM :

6.9

Test MSE for RM :

53.0667

For Boosted Decision Stumps, I used the threshold value(s =6.9) and ita = 0.01 and B = 1000.

The TEST MSE of the SYSTEM is :

53.06671

Graph between MSE vs B (1:1000)

