JOHNS HOPKINS
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of ENGINEERING

Applied and Computational Mathematics

Data Mining
625.740
Decision Trees

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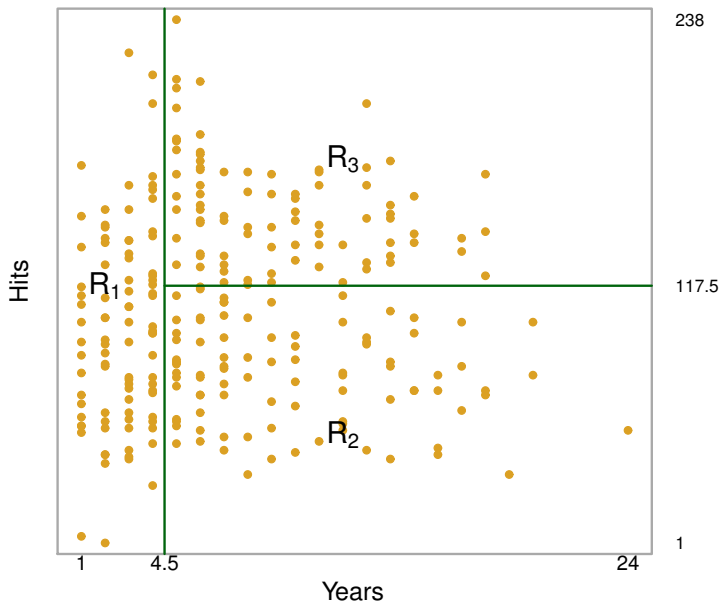
Regression Tree

Figure(s) from "An Introduction to Statistical Learning, with applications in R" (Springer, 2013) with permission from the authors: G. James, D. Witten, T. Hastie and R. Tibshirani

Three Region Partition



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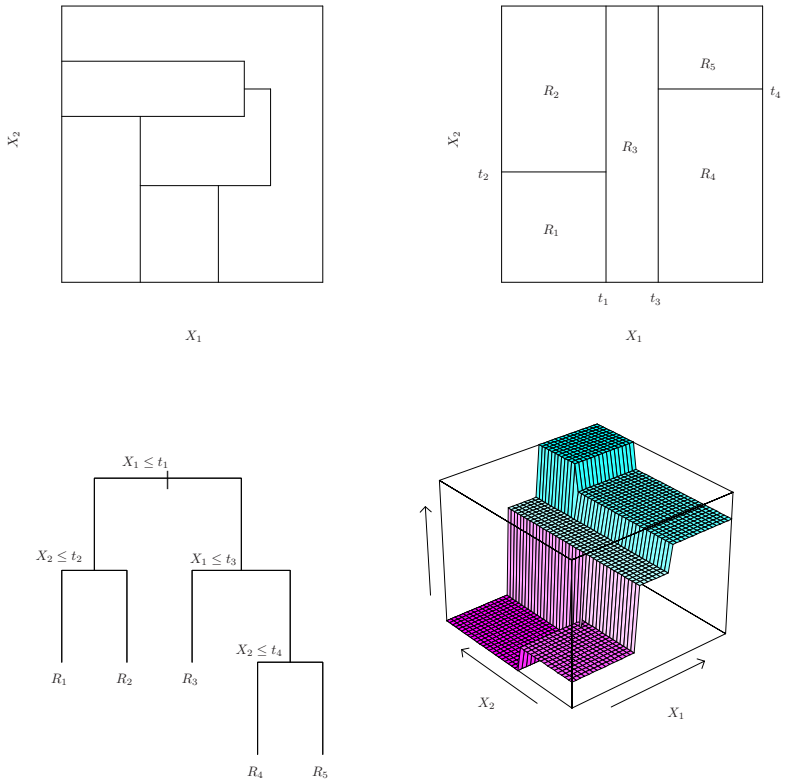
Recursive Binary Splitting



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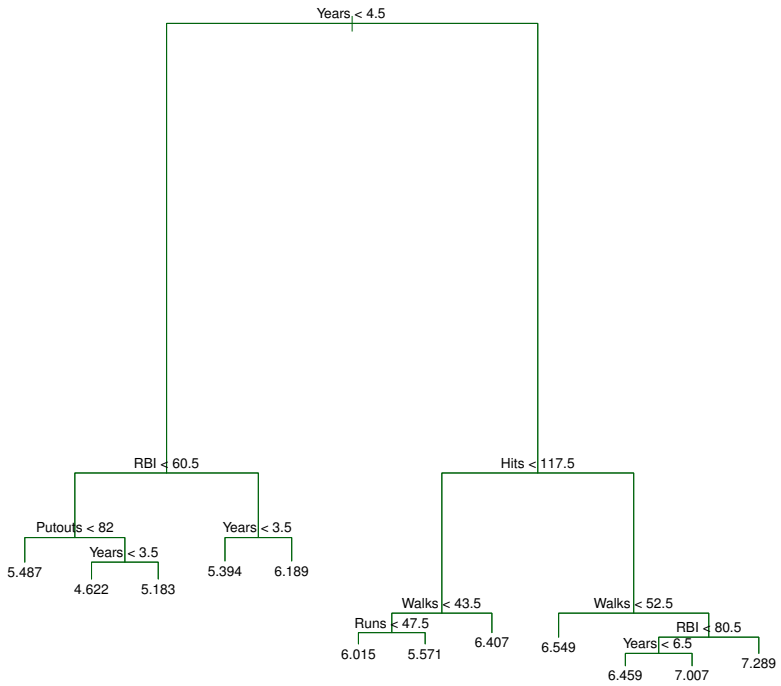
Regression Tree Analysis



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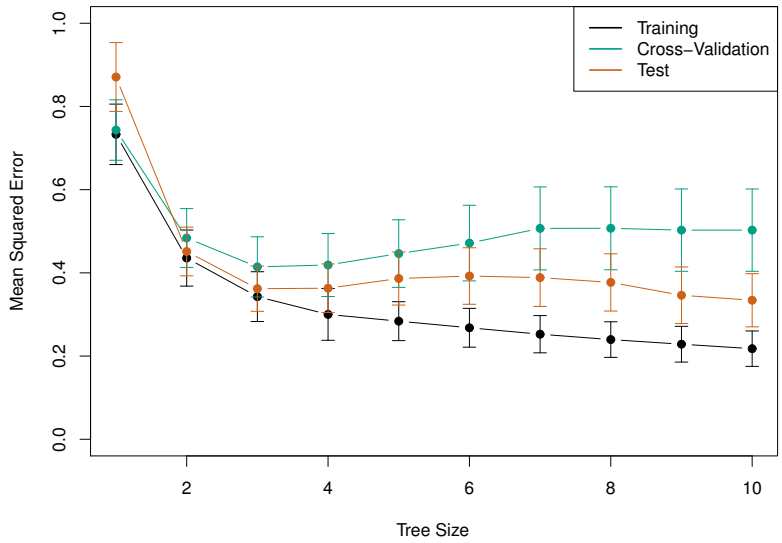
Regression Tree Analysis: Mean-Square Error vs. Number of Terminal Nodes



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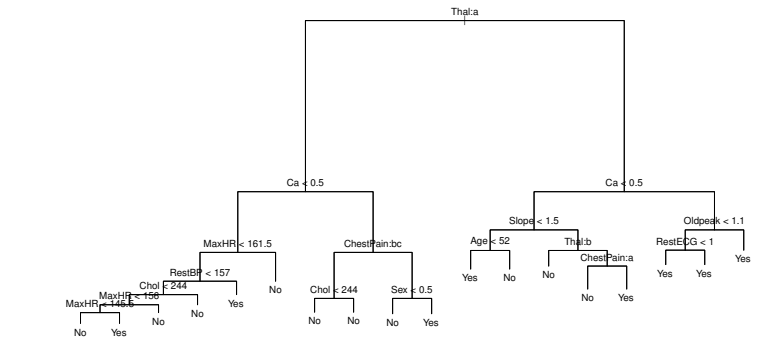
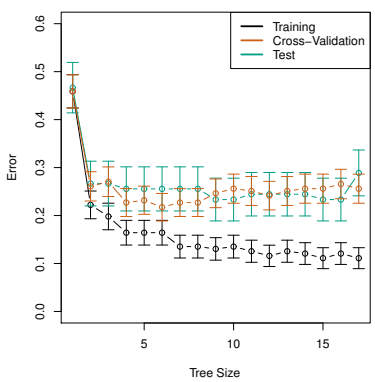
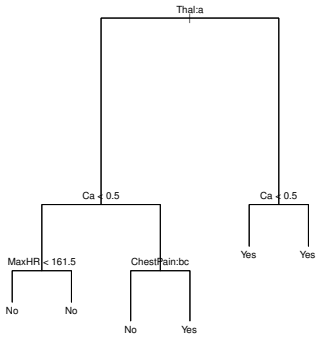
Unpruned Tree, Errors, Minimal CV Error Pruned Tree







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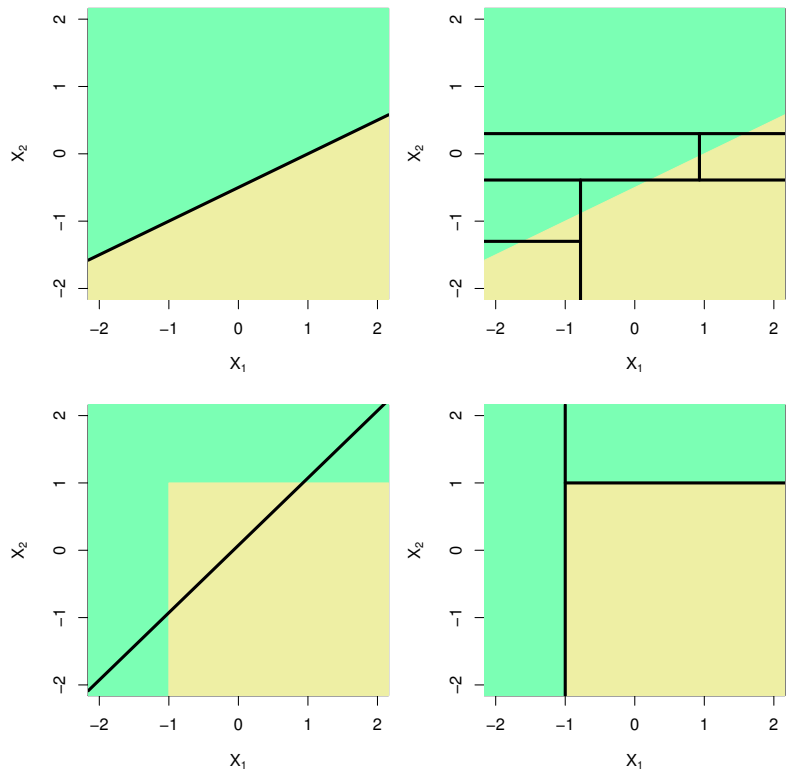
Two Dimensional Classification Example



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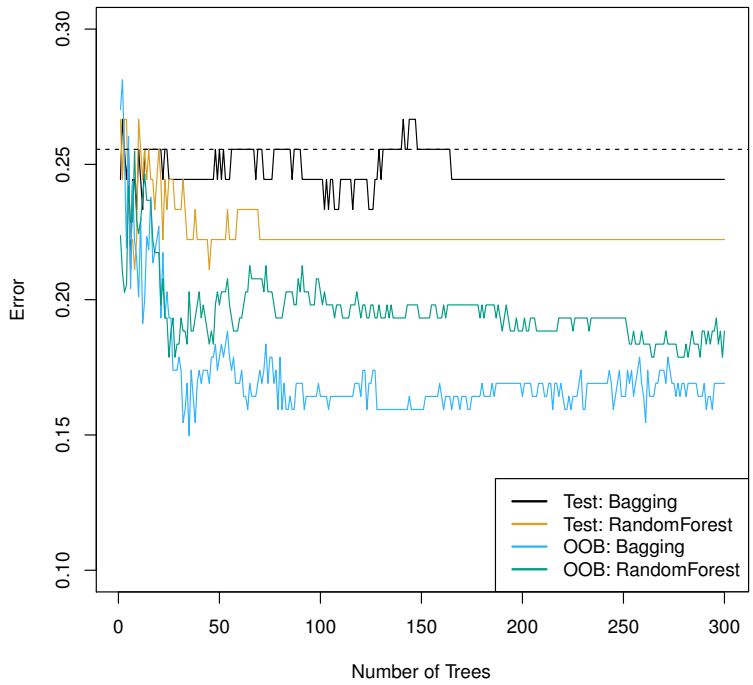
Bagging and Random Forest Results



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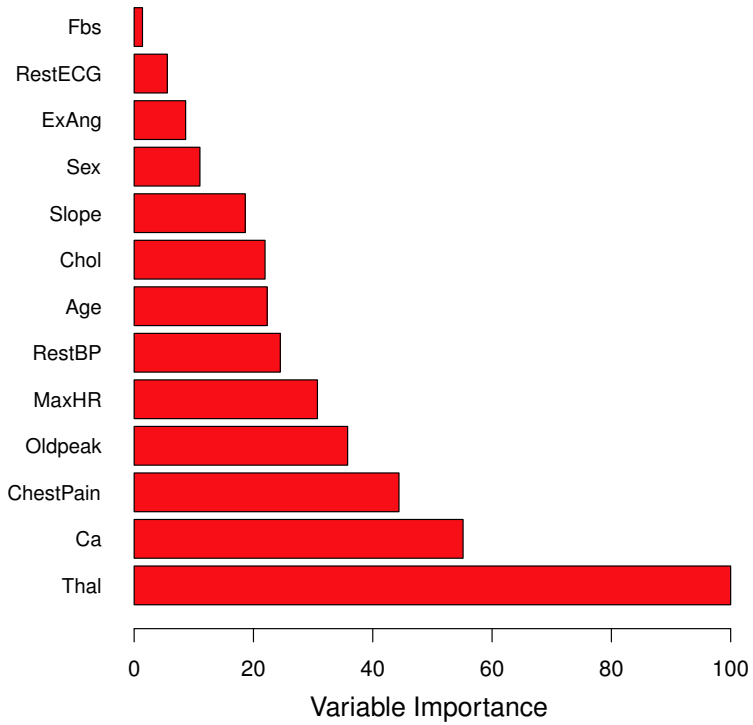
Variable Importance Plot



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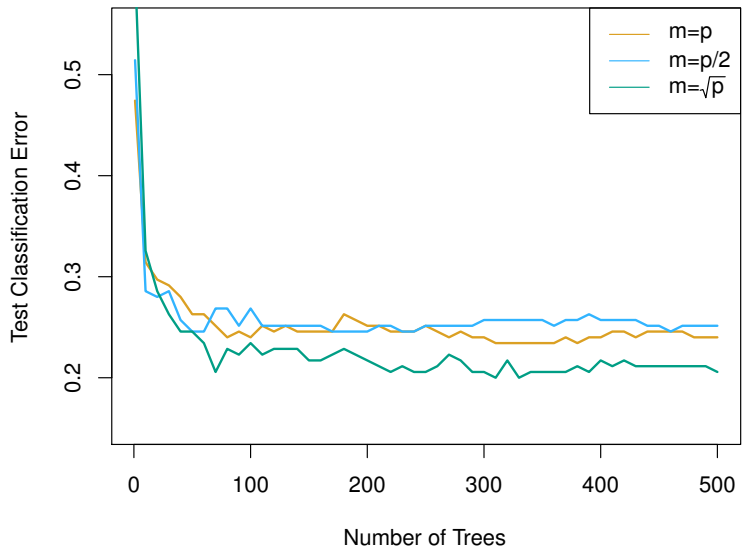
Random Forest Results



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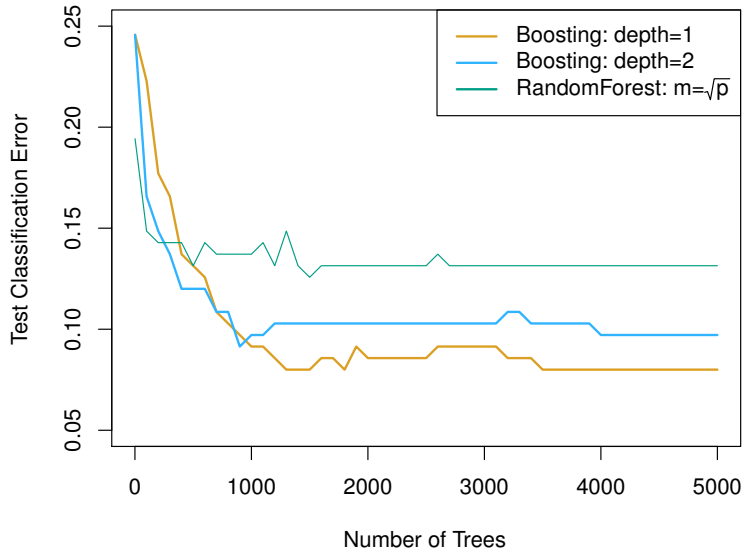
Boosting and Random Forest Results



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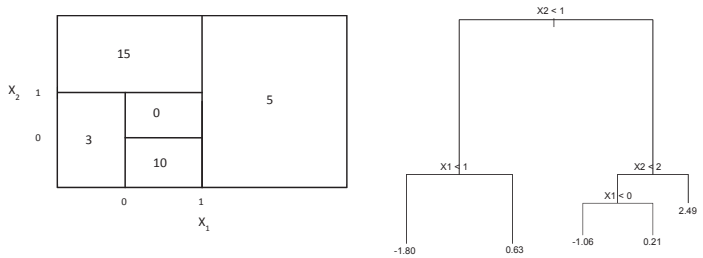
Exercise 4 a & b



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