Exercise

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TUM Department of Informatics

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	Informatics 3 - Professorship of Data Mining and Analytics
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kNN Classification

Problem 1:

Problem 2:

Problem 3:

False, the feature test performed in a node is done by only evaluating one feature to split the training data. Therefore decision boundaries can only be parallel to the axis respectivly. This means that a decision tree at depth 1 can never produce a diagonal as shown in the plot. For that reason a huge depth would be needed to approximate the diagonal.

Problem 4:

Programming Task

Problem 5: *Add notebook html here*

Appendix

We confirm that the submitted solution is original work and was written by us without further assistance. Appropriate credit has been given where reference has been made to the work of others.

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