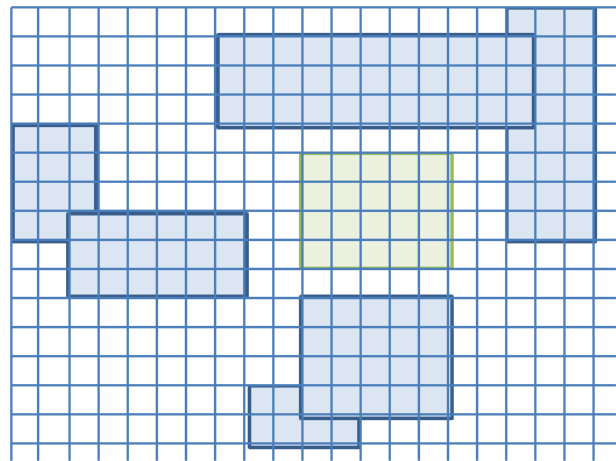


Exercises for Spatial Databases and GIS

Sheet 7 (until 15.12.2017)

Exercise 1 (R-tree)

The blue rectangles had been in one r-tree node. After the insertion of the green rectangle a split is necessary. Use the algorithm with linear complexity to determine the seeds and distribute the rectangles into two nodes.



Exercise 2 (BSP-tree)

1. Construct the BSP tree using the heuristic (slide 473) for the example on slide 477. In contrast to the solution presented during the lecture, objects that lie on the same splitline should be stored in one node.
2. What influence does the orientation of the split lines have, i.e. how would the tree change if you change the orientation of some of them?

