

# ***BTD \* Binary Tree \* Distances***

*Ever wondered how a route planner comes up with an answer to your wishes ?*

*It looks up in huge tables of names and distances. But it must be fast.*

*For this purpose binary trees are the perfect solution.*

*But we will keep it simple here.*

*Data for this exercise is a spreadsheet with the distances between all the major cities of Jylland and Copenhagen.*



## ***Exercise 1***

*Make a binary tree of distances from a chosen city (your choice) in Jylland, so the left most node is representing the shortest distance and the rightmost the largest.*

*Make sure, that you can balance the tree.*

## ***Exercise 2***

*Extend Exercise 1 so each node contains information of both distance and name of city.*