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# Query Optimization

## 9. Exercise, Winter 2007/2008

Due 2008-01-15

1. The meta heuristics like tabu search require both a description (i.e., encoding) of a solution and a local change mechanism that perturbrates the currently considered solution. Give an example for a possible encoding and multiple alternatives for change functions. How does the choice affect the behavior of the meta heuristic? (3)
2. Give an example for an join ordering encoding, a change function and a start solution where Iterative Improvement does not find the optimal solution. (2)
3. Implement the Quick-Pick algorithm. Generate a number of random trees (e.g.  $n^2$ ) and pick the best one. Try to keep the Quick-Pick algorithm "quick"! (5)