



IT-UNIVERSITY OF COPENHAGEN

INTELLIGENT SYSTEMS PROGRAMMING

Mandatory exercise 6

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1 Exchange

To show that applying

Figure 1 shows a decision problem with three variables. There are $N!$ possible assignments of the variables, so when $N = 3$ there are 6 possible assignments. The yellow circle shows an arbitrary starting assignment, and the arrows represent applying the 3-exchange and 2-exchange neighborhood functions. By following the arrows, we see that all possible assignments are reachable.