## 1. Wolf, ram, and cabbage problem

- Goal: move wolf, lamb and cabbage to B Restriction:
  - Boat can deliver only 1 object with a person
  - Lamb eats cabbage and wolf eats lamb if a person is not with them
- To do:
  - Part I:
    - 1. Model this system in CCS
      - When all of wolf, lamb, and cabbage are delivered to B, the system should generate "finish" action and halt
    - 2. Show that there exists a solution to the problem using simulation feature of CWB-NC
    - 3. Show that there exists a solution using GCTL* model checking capability
    - 4. Show that there exists a solution using proper equivalence semantics
  - Part II: do the same task using NuSMV and Promela
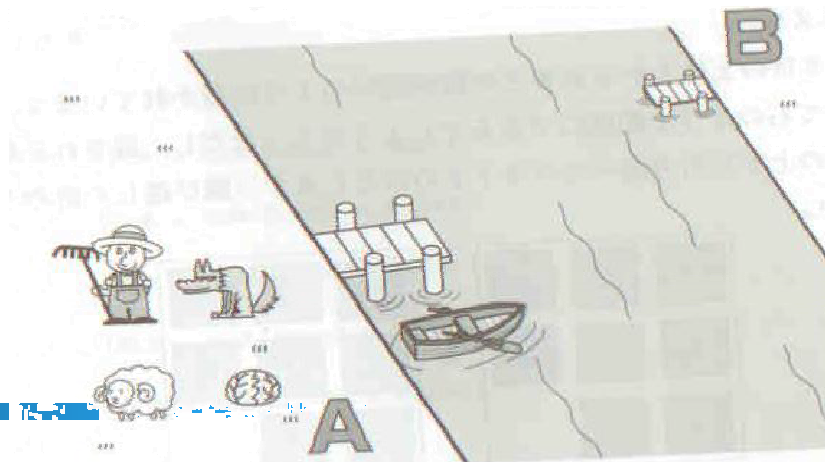
2. Build revised mutual exclusion protocol (see NuSMV lecture slides ½) in Promela and verify the correctness of your Promela model

- Hint. Spin provides a weak fairness option in Xspin GUI and command line argument

3. Build ABP (see NuSMV lecture slides 2/2) in Promela and verify the correctness of your Promela model