Logic programming (P100 & P101)

karU

Practical Assignment 2

Individual task

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instructions

Question 1   (10 marks)

The farmer has a wolf, a goat, and a cabbage, and needs to transport all of them across the river using a small boat. However, he can only take one item at a time in the boat, and there are some restrictions on what can be left together on either side of the river.

Rules:

1. The farmer cannot leave the wolf and the goat alone together on either side of the river because the wolf will eat the goat.

2. The farmer cannot leave the goat and the cabbage alone together on either side of the river because the goat will eat the cabbage.

what sequence of moves will ensure that the farmer gets everyone across safely? Write the moves using prolog language.

Hint

Performs a breadth-first search on the state space, producing an answer path solution.

bfs(solution).