



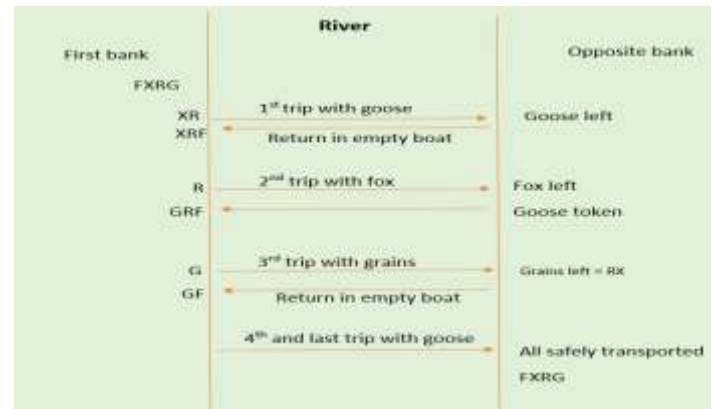
FARMER, GOOSE, GRAIN, FOX PROBLEM

Idea of project

A farmer (F) wants to move himself, a fox (X), a goose (G), and some grains (R), across a river.

- The boat can take only one of his possessions across on any trip.

- An unattended fox will eat a goose, and an unattended goose will eat grains, therefore, the farmer must not leave the fox alone with the goose nor the goose alone with the grains.



Description of language

$L = \{wbw; : w = \{X, G, R, F, ;, -, \}\}$, where b is the boat, ; mean end of one trip and - is empty string.

Sample for accepted strings

- XGRFb-; XRbGF; XRFbG; RbXGF; GRFbX; GbXRF; GFbXR; -bXGRF
- XGRFb-; XRbGF; XRFbG; XbGRF; XGFbR; GbXRF; GFbXR; -bXGRF

Sample for Rejected strings

- XGFRb-; -bXGRF
- XGRFb-; RFbGX; -bRGFX
- XGRFb-; XFbGR; -bXFGR

Prototype for the interface



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