**CMPE480 Project 2**

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**Predicates:**

(atShore ?obj - cargo ?sh - shore): true if cargo obj is at shore sh

(eats ?obj1 - cargo ?obj2 - cargo): true if cargo obj1 eats cargo obj2

(on ?sh - shore): true if farmer is on shore sh

(onBoat ?obj): true if cargo obj is at shore sh

**Actions:**

TAKE\_TO\_BOAT: if cargo obj is at shore sh, the farmer is on sh and there is no pair of cargos that eats one another; with the help of this action, the farmer is not on sh, obj is not at shore sh and obj is on boat anymore.

TAKE\_TO\_SHORE: if cargo obj is not at shore sh, the farmer is on boat; with the help of this action, the farmer is on sh, obj is at sh and obj is not on boat anymore.

GO\_TO\_SHORE: if the farmer is on sh1 and there is no danger of cargos eating one another at shore sh1, farmer goes to sh2 from now on.

**Objects**

wolf - cargo

goat - cargo

cabbage - cargo

shore1 - shore

shore2 - shore

**Initialization**

(atShore wolf shore1) (atShore goat shore1) (atShore cabbage shore1)

(eats wolf goat) (eats goat cabbage) (on shore1)

At first; wolf, goat and cabbage is at shore1. Wolf eats goat if they are alone, goat eats cabbage if they are alone. Farmer is on shore1.

**Goal**

(and (atShore wolf shore2) (atShore goat shore2) (atShore cabbage shore2) (on shore2))

We want to bring every cargo to shore2.

**Found Plan:**

