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CSC 4444 Assignment 1

Goal based agent - seeks to achieve a goal that describes situations that are desirable
- Considers world after taking action
- Flexible to make decisions that can adjust to changes in situations

1. State ← UPDATE STATE(state, action, percept, model)
if GOAL-ACHIEVED (state, goal) then return null action
if plan is empty then
plan ← PLAN(state, goal, model)
action ← FIRST(plan)
plan ← REST(plan)
return action

2.

a. State space - All potential city pairings within the country

b. initial state - All potential city pairings in the country

c. The most equidistant city between the individual starting points. The series of smallest d(i, j) for both friends. Friend 1 & Friend 2 in the same city.

d. The actions simultaneously move each friend to a neighbouring city

e. d(i, j)