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Page No.
Date

Experiment - 1

Aim :- To implemented a intelligent agent.

What is an intelligent agent

An intelligent is a software program that's capable of acting indepently to achieve certain goal and respond to people about the event that are happening in the surrondings. In the experiment we take a look at water at Jug Problem and Missionary Cannibal and design an intelligent agent for it.

→ Water Jug Problem.

In this problem, we have two jug A,B with capacity A,B and there are no maskings for measurement. From an intial empty state we have a final state. Its PEAS is defined as P → performance for no of steps, E → Environment (Puzzle). Actuators for moving jugs and sensor to measure water level. The possible moves are 1) fill jug 2) Empty A, B 3) Transfer partially/fully to A to B & vice versa Thus by using the recursive approach for finding a possible starting state and then expanding the given node to find the final state.

→ Missionary Cannibal problem.

In this problem, Missionary & Cannibal have to reach Bank A to B where no. of cannibal cannot outnumber the no. of missionary PEAS is defined as performance is defined as numbers of trips, Environment (Puzzle), Actuator for moving boat, Sensor for checking on banks. We use the same recursive call to find the goal state after expainding and finding all valid states

In conclusion, we need to eliminate invalid state in order to optimize the recursive call.