

function AND-OR-SEARCH(*problem*) **returns** a conditional plan, or *failure*
 return OR-SEARCH(*problem*, *problem*.INITIAL, [])

function OR-SEARCH(*problem*, *state*, *path*) **returns** a conditional plan, or *failure*
 if *problem*.IS-GOAL(*state*) **then return** the empty plan
 if IS-CYCLE(*state*, *path*) **then return failure**
 for each *action* **in** *problem*.ACTIONS(*state*) **do**
 $plan \leftarrow \text{AND-SEARCH}(problem, \text{RESULTS}(state, action), [state] + [path])$
 if $plan \neq failure$ **then return** $[action] + [plan]$
 return failure

function AND-SEARCH(*problem*, *states*, *path*) **returns** a conditional plan, or *failure*
 for each s_i **in** *states* **do**
 $plan_i \leftarrow \text{OR-SEARCH}(problem, s_i, path)$
 if $plan_i = failure$ **then return failure**
 return [if s_1 **then** $plan_1$ **else if** s_2 **then** $plan_2$ **else** ... **if** s_{n-1} **then** $plan_{n-1}$ **else** $plan_n$]