1811105016 Deepraj Bhosale
Batch-A

M T W T F S S
Page No.:
Date:
YOUVA

AI Tutorial 1

Initial State :- $(1,1,1,1,E)$

Farmer Dog Rabbit Lettuce $\rightarrow$ East Bank

Final State :- $(0,0,0,0,W)$

$\rightarrow$ West Bank.

Rules

Farmer goes with dog from E to W.

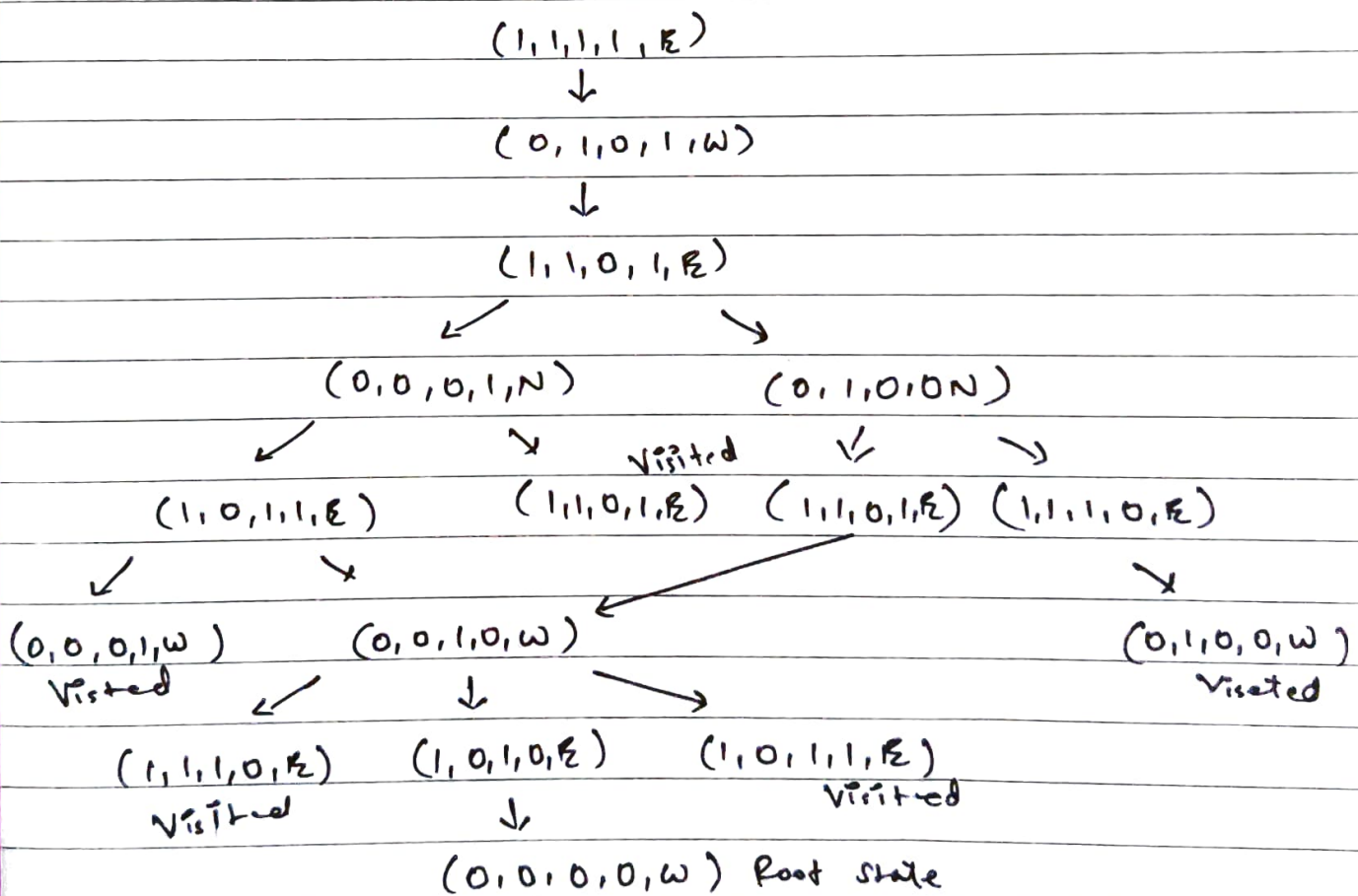Farmer goes with dog from W to E.

Farmer goes with Rabbit from E to W

Farmer goes with Rabbit from W to E.

Farmer goes with lettuce from E to W

Farmer goes with lettuce from W to E

Farmer goes alone from E to W

Farmer goes alone from W to E.

$(1,1,1,1,E)$
$\downarrow$
$(0,1,0,1,W)$
$\downarrow$
$(1,1,0,1,E)$

$(0,0,0,1,N)$ $(0,1,0,0N)$

     Visited

$(1,0,1,1,E)$ $(1,1,0,1,E)$ $(1,1,0,1,E)$ $(1,1,1,0,E)$

$(0,0,0,1,W)$ $(0,0,1,0,W)$ $(0,1,0,0,W)$
Visited   Visited

$(1,1,1,0,E)$ $(1,0,1,0,E)$ $(1,0,1,1,E)$
Visited   Visited

$(0,0,0,0,W)$ Root State

Path: $(1,1,1,1,E) \rightarrow (0,1,0,1,W) \rightarrow (1,1,0,1,E) \rightarrow (0,0,0,1,W)$
$\rightarrow (1,0,1,1,E) \rightarrow (0,0,1,0,W) \rightarrow (1,0,1,0,E) \rightarrow (0,0,0,0,W)$