AI üY

Ex 2.4)

a.) instal state: (0,0)

acklons: e3: (x,y) -> (0, y) for

e4: (x,y) -> (x,0) 470

f3: (x,4) -> (3,4) x x 3

474 f4: (x,y) -> (x,4)

P3: (x,4) -> (x-2,4+2)

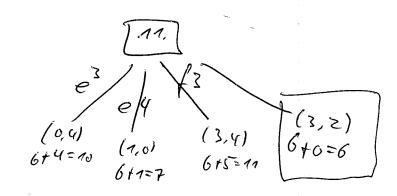
14: (x,y) -> (x+2,4-2)

state[n]	4(4)
(*,2)	O
(0,0)	5
(3, 4)	5
(3,4), 4 { 2,4}	3
(0,4), 7 £ {0,2}	4
else	1

(0,0) F3 2=2+0 path-maxcorrection [2] (3,0) [3.] (0,4) 1+3=4->5 1+4=5 64 p4 63 (3, 7)(0,3) (0,0) (0,0) (3, 4)(3,4) 2 4 3 = 1-2+5=4 2+3=5 215=7 2+5=7 215=7 (0,5) (0,0) (0,4) (3,3) (3,4) 313=6 (3,0) (0,4) 3+5=8 314=7 3+1=6 18. 3+4=7 3+7=4-5 (7,0) (0,4) (0,4) (3,7) 4+3=7 (0,0) 4+5=9 44755 P3 (9,0) (0,7) (9,0) (3,0) 5-+5=10 \$73=8 (1,4)

517=6

AI UY



path-max-correction:

n parent of u'  $f(u') = \max\{f(u), g(u') + h(u')\}$ 

function MAX-VALUE (state) returns a utility value

If FERMINAL-SAFFE(shik) then

return UTILITY (state)

for <a, s > m SUC(ESSORS(shek) do

If WINNER(s) = MAX from

V = MAX (V, MAX-VALUE(s))

else

D V = MAX(V, MIN-VALUE(s))

return V

MAN-VALUE(s Fate) Differences V = O H WINNER(s)=MIN

VEMIN(V, MIN-VALE(S)) VEMIN(V, MAX-VALUE(S))

2

b.) MAX[(10,53,44)(8,47,06]: x° C-10 MN[(10,144)(8,47,D6)]:53° [-]:44° [...]: (10° MAX[\$10,44/47,06]:x MAX[cre,44/C8,06]:x1 MAX[cre,44/C8,47]:x1 MIN[44/ (8,06]: CTO MIN[\$10/ (8,06]: 44 06 MAX[(10108]: 22 MAX[C101D6]:\* MAX [A4106]:x2 100 100 MAX[106]: CT02 MIN[108]: (10) 106 MN[ 106]: H42 108 [1].3 106 [17:3 [17:3