

Assignment 2

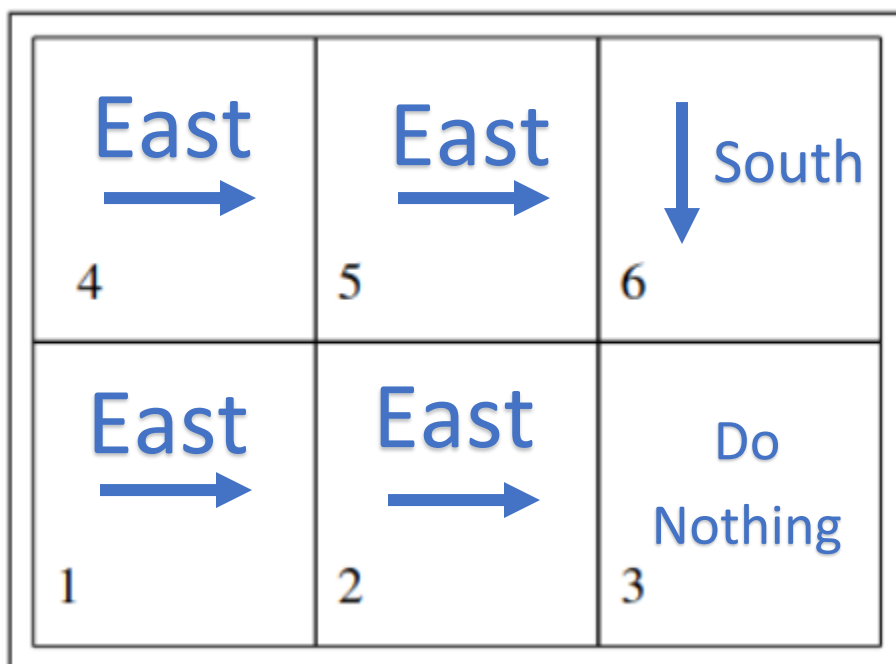
200088D

K.H.T.Chathumina

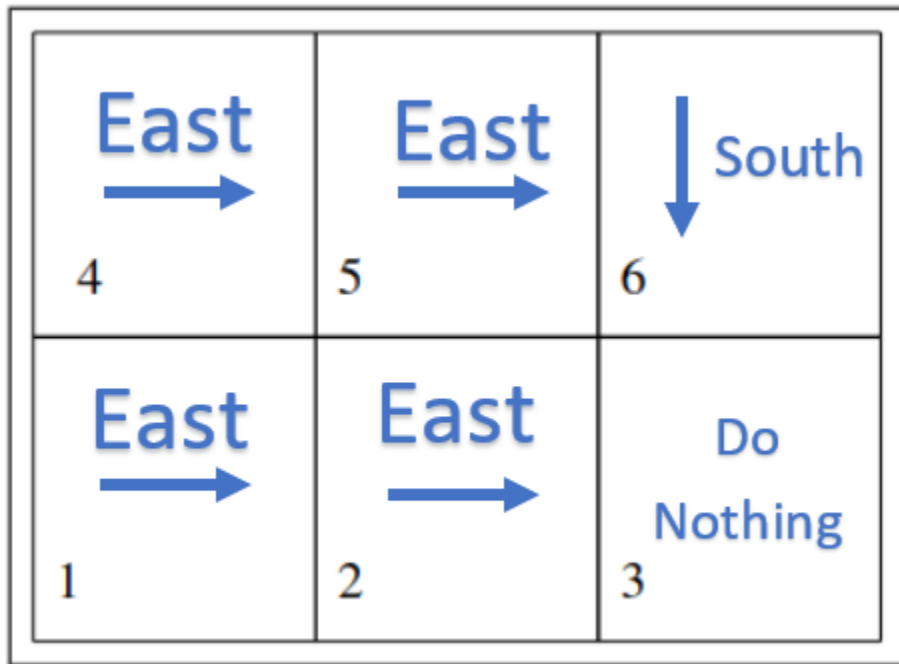
State	Expected utility for taking each action					Best action	Expected utility for best action	Updated utility
	North	East	South	West	Nothing			
1	-0.09	-0.005	0	-0.005	0	Nothing	0	-0.1
2	-0.095	-0.005	-0.005	-0.095	0	Nothing	0	-0.1
3	-	-	-	-	-	Nothing	-	1
4	0	0	0	0	0	Nothing	0	-0.1
5	-0.005	0	-0.005	-0.09	0	Nothing	0	-0.1
6	-0.005	0	-0.005	-0.09	0	Nothing	0	-0.05
1	-0.1899	-0.105	-0.1	-0.105	-0.1	Nothing	-0.1	-0.1999
2	-0.0994	0.8873	-0.05	-0.1927	-0.1	East	0.8873	0.7864
3	-	-	-	-	-	Nothing	-	1
4	-0.1	-0.1	-0.1	-0.1	-0.1	East	-0.1	-0.1999
5	-0.1025	-0.055	-0.025	-0.1899	-0.1	South	-0.025	-0.1549
6	-0.0552	0.0025	0.8898	-0.092	-0.05	South	0.8898	0.8389
1	-0.204	0.6848	-0.1506	-0.2029	-0.1999	East	0.6848	0.5841
2	0.6964	0.9736	0.7869	0.5993	0.7864	East	0.9736	0.8726
3	-	-	-	-	-	Nothing	-	1
4	-0.1977	-0.1594	-0.1977	-0.1999	-0.1999	East	-0.1594	-0.2593
5	-0.1105	0.7865	0.7367	-0.2018	-0.1549	East	0.7865	0.6858
6	0.8312	0.8469	0.9762	0.7091	0.8389	South	0.9762	0.9253

*Expected utility for 3rd state is not calculated because it is the terminal state and its value does not change.

Best policy for each square after 3 iterations.



Best policy at the end.



On what iteration does the policy converge? 3rd iteration

How many iterations does it take the utilities to converge? 10 iterations