In-class
12/02

Initial state : 2 ; $\gamma = 0.8$

$Q(s,a) = R(s,a) + \gamma \times Max[Q(s',a')]$

$R(2,3) = 0$

$Q(s',a') = [Q(3,1), Q(3,2), Q(3,4)]$

$= [80, 0, 0]$

$Max[Q(s',a')] = 80$

$Q(2,3) = 0 + 0.8 \times 80 = 64$

$R(3,1) = 0$

$Q(s'a') = [Q(1,3), Q(1,5)] = [0, 100]$

$max[Q(s',a')] = 100$

$Q(3,1) = 0 + 0.8 \times 100 = 80$

$R(1,5) = 100$

$Q(s',a') = [Q(5,1), Q(5,4), Q(5,5)]$

$= [0, 0, 0]$

$Max[Q(s',a')] = 0$

$Q(1,5) = 100 + 0.8 \times 0 = 100$

$Q =$

	0	1	2	3	4	5
0	0	0	0	0	0	0
1	0	0	0	0	0	100
2	0	0	0	64	0	0
3	0	80	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0