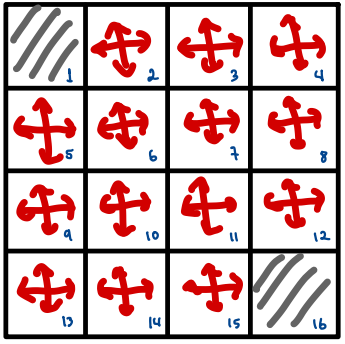
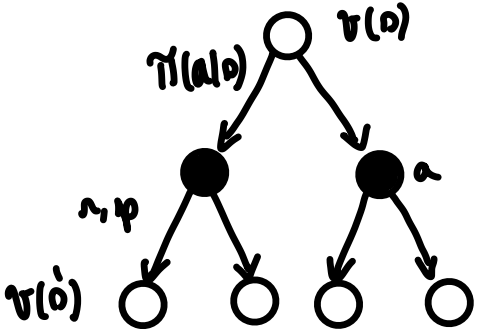
K=0

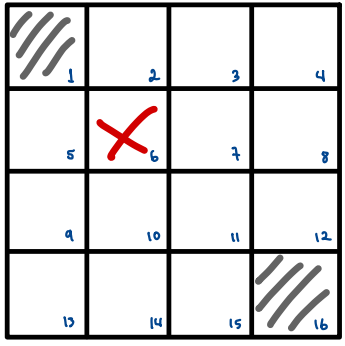
0.0	-1	-2	-2
-2	-3	-3	-2
-2	-3	-3	-1
-2	-2	-1	0.0

Policy 0





K = 1



$$v_1(6) = \max_a \sum_{s'} p(s'|a,6)[r + \gamma v_0(s')]$$

$$v_1(6) = \max_a \begin{cases} p(2|\uparrow,6)\,[-1-1] \\ p(10|a,6)\,[-1-3] \\ p(7|\rightarrow,6)\,[-1-3] \\ p(5|\downarrow,6)\,[-1-2] \end{cases} \leftarrow \text{Max}$$

$$\boxed{v_1(6) = -2}$$