



1) MRP 를 사용하여 $V(s)$ 도출.

$$V(s) = \sum_{r, s'} p(s', r | s) (r + \gamma V(s'))$$

"1"로 설정 (pointing to r)
 "random = 0.5" 설정 (pointing to γ)

- $V(A) = \frac{1}{2} (0 + V(B)) \longrightarrow V(B) = 2V(A)$
- $V(B) = \frac{1}{2} (V(A) + V(C)) \longrightarrow 2V(A) = \frac{1}{2} (V(A) + V(C)) \therefore V(C) = 3V(A)$
- $V(C) = \frac{1}{2} (V(B) + V(D)) \longrightarrow 3V(A) = \frac{1}{2} (2V(A) + V(D)) \therefore V(D) = 4V(A)$
- $V(D) = \frac{1}{2} (V(C) + V(E)) \longrightarrow 4V(A) = \frac{1}{2} (3V(A) + V(E)) \therefore V(E) = 5V(A)$
- $V(E) = \frac{1}{2} (V(D) + 1) \longrightarrow 5V(A) = \frac{1}{2} (4V(A) + 1) \therefore V(A) = \frac{1}{6}$

$$V(A) = \frac{1}{6}, \quad V(B) = \frac{2}{6}, \quad V(C) = \frac{3}{6}, \quad V(D) = \frac{4}{6}, \quad V(E) = \frac{5}{6}$$