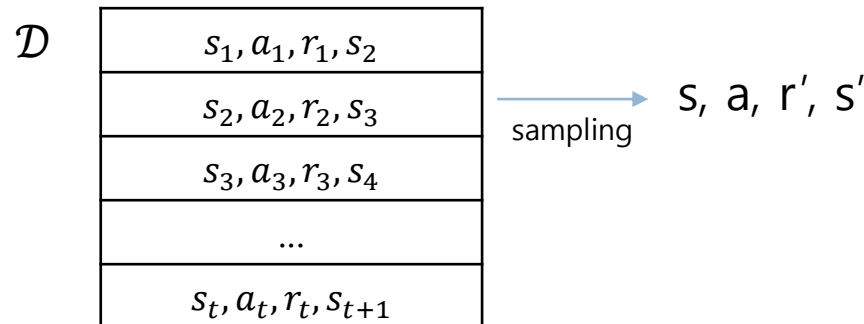


Experience Replay

Definition: Experience Replay

- 에이전트가 환경과 상호작용하면서 얻은 경험을 메모리에 저장해두고, 나중에 무작위로 샘플링하여 학습하는 기법



- To perform experience replay, repeat the following:**
 - $(s, a, r, s') \sim \mathcal{D}$: sample an experience tuple from the dataset
 - Compute the Q-learning loss from the samples

$$L(\theta) = \left[(R + \gamma \max_{a'} Q(s', a'; \theta^-)) - Q(s, a; \theta) \right]^2$$