

## Pseudocode for Reinforcement Learning with Custom Env for TD3 and TD3\_INVASE

```
class CustomEnv:
    Initialize environment with data and targets
    Define observation and action spaces

    def reset():
        Return initial state

    def step(action):
        Calculate reward based on action and target
        Transition to next state and check if done
        Return next state, reward, done

# Setup RL policy and replay buffer
policy = TD3(policy_args)
replay_buffer = ReplayBuffer()

# Training loop
for each training repeat:
    Reset policy and replay buffer
    Evaluate initial policy

    for each timestep:
        if not enough samples:
            action = random action
        else:
            action = select action based on policy + noise

        Perform action, get reward and next state
        Save experience to replay buffer

    if enough samples:
        Train policy using replay buffer

    Every few timesteps:
        Evaluate policy

    If episode ends:
        Reset environment and log results
```