

TDT4171 — Artificial Intelligence Methods

Assignment 9 - Reinforcement Learning

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Value Iteration

The value iteration algorithm finds the optimal policy for a given MDP. The results obtained are shown in the following sections.

Utilities

The utilities for the states are shown in Figure 1.

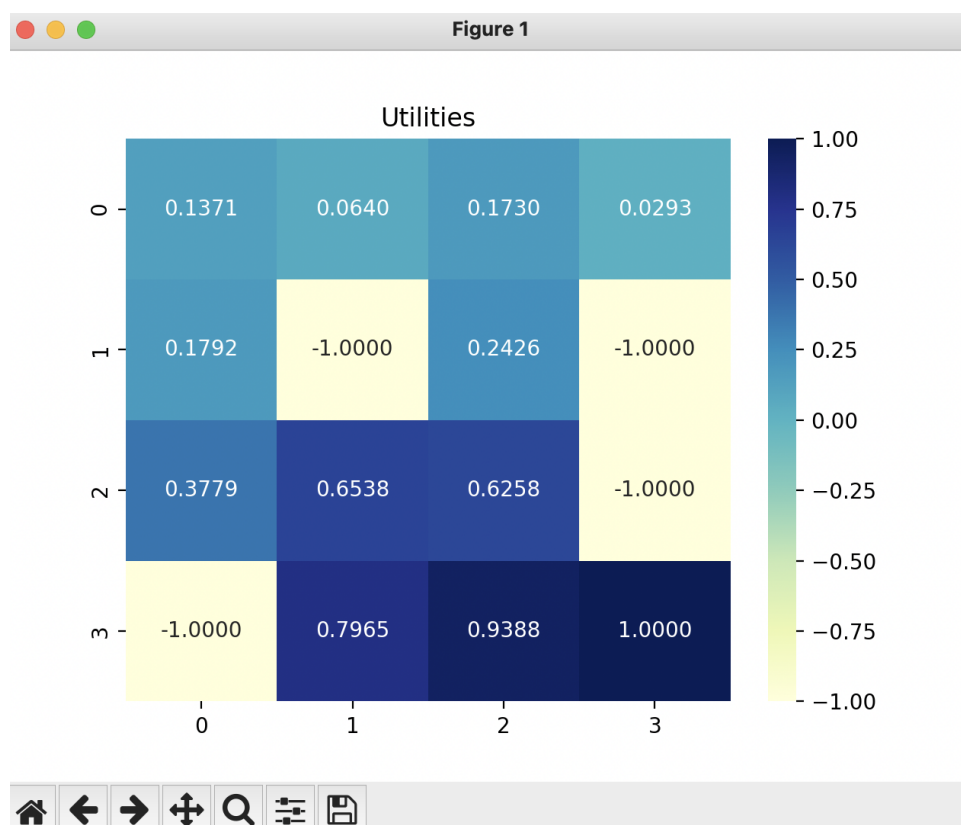


Figure 1: Utilities for the states

Greedy Policy

The greedy policy for the states are shown in Figure 2.

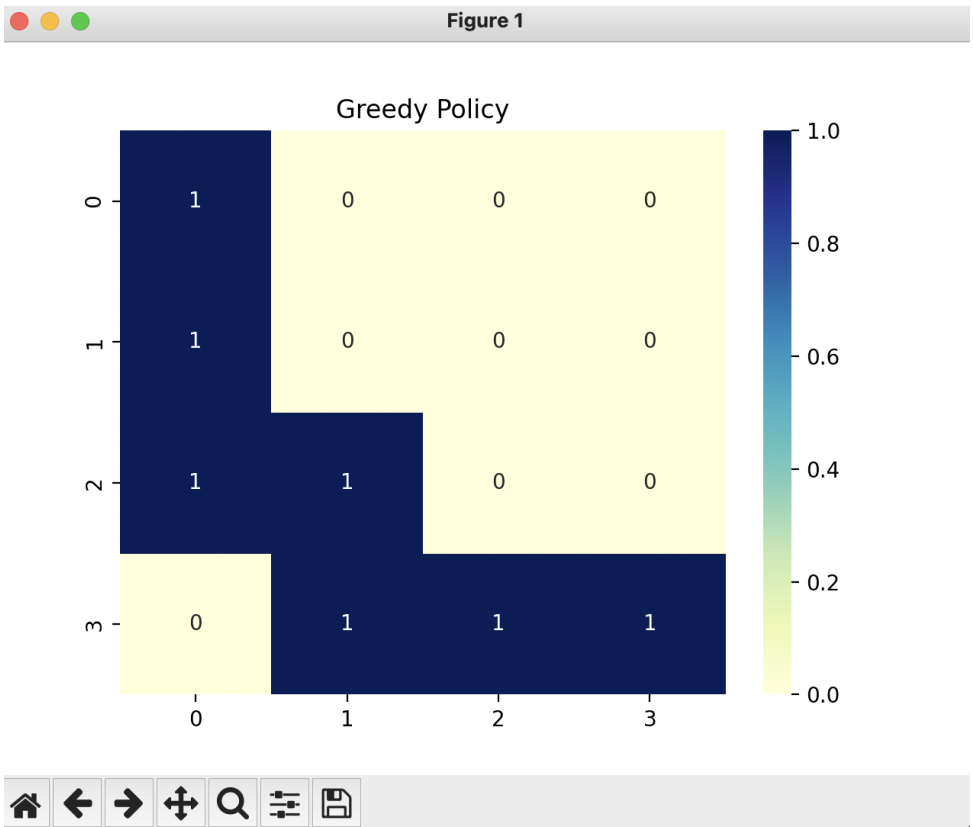


Figure 2: The corresponding greedy policy to the utilities

Conclusion

The implemented value iteration algorithm seems to find the optimal policy for the given MDP.