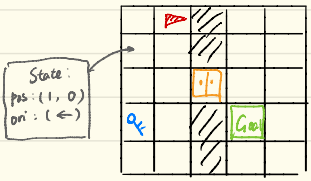
1. GIF

2. Optimal Policies & Values

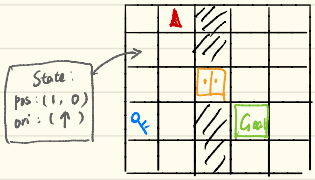
① Plot the policies & values for all states that have been explored.

- For shortest path solutions:
  - Policy: for states included by the shortest path.
  - Value: for all explored states
- For dynamic programming solutions
  - Policy or Value: for all states

② We suggest using $N \times N$ grid maps. You'll need to "flatten" the higher dimensions, such that each cell represents a unique state. For example, if you have a state space: $(x, y, r) \in \mathbb{R}^3$, where $(x, y)$ is position and $r \in \{0, \frac{\pi}{2}, \pi, \frac{3\pi}{2}\}$ is the orientation, you'll need to plot 4 grid maps w.r.t. different "$r$".




$r = 0$




$r = \frac{\pi}{2}$

. . .

$r = \pi, \frac{3\pi}{2}$

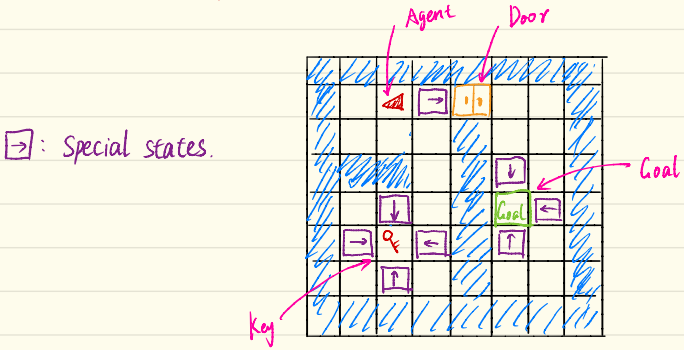
* Example actions representations: (not necessarily)

- Forward :
- Turn Left/Right :
- Pickup Key :
- Unlock Door :

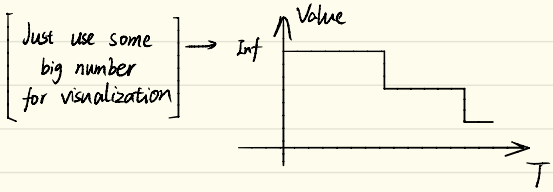
3. Optimal Action Sequence

[MF → TR → MD → TL → UD → TL → ⋯ ]

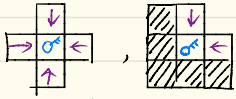
## 4. Value Curve for some special states:



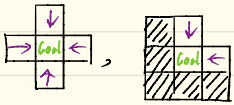

For those → states, plot the value vs. T




☆ You must include the following states in your report.

① States that can pick up the key: 

② The state that can unlock the door: 

③ States that can reach the goal in 1 step. 


There will be around 9 curves for each scene.