Code Structure

Filename	Function
`1-Environment.R`	• Setting up the environment of the maze using object-oriented programming
`2-GenerateEpisode.R`	• Calls `1-Environment.R` • Includes functions that: map board positions to state space, generate episodes when following a specified policy, calculates an e-greedy policy based on Q(s,a)
`3-DrawMaze.R`	• Calls `2-GenerateEpisode.R` • Includes the function to draw the optimal action for a given maze
`4-<Algorithm-Name>.R`	• Returns average episode return and the optimal policy for given algorithm
`5a-EpsilonComparison.R`	• Returns average episode return and the optimal policy for q-learning based on 4 different epsilon update rules • Outputs the average runtime of each epsilon update rule
`5b-nStepSARSAComparison.R`	• Returns average episode return and the optimal policy for nStepSARSA, varying the step size parameter. • Outputs a figure to show each tested step size average episode return.
`main.R` ← Run only this.	• Calls `3-DrawMaze.R` and all of the `4-<Algorithm-Name>.R` files. • Define all the parameters and initial estimates here • Plot the results for the episode returns of each of the algorithms