



## 1) RL Environment

Actions			
Up: 0	Down: 1	Left: 2	Right: 3

Tile Type in Grid					
Queen: Q	Pig: P	Rock: R	Tile: T	Goal: G	Tnt: TNT

Function	Information	Return object
<b>env.reset()</b>	This function resets the environment, starting a new episode with the initial state of the environment.	(0, 0)
<b>env.step(action)</b>	<p>This function processes an action, moving the agent to the next state based on predefined action probabilities. It returns the following:</p> <ul style="list-style-type: none"> <li>The next state, represented as the agent's position in the grid (a tuple, e.g., (1, 2)).</li> <li>The reward associated with the action.</li> <li>The states of all pigs on the grid, represented as an array of boolean values where True indicates that the pig corresponding to the index is alive, and False indicates it is dead.</li> <li>A boolean value, <code>is_terminated</code>, which indicates whether the episode has ended.</li> </ul>	<p><code>next_state</code>, <code>reward</code>, <code>pig_states</code>, <code>is_terminated</code></p>
<b>env.render(screen)</b>	This function displays the game environment and can be called within the game loop.	-