**Question 1**

**Introduction:**

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| The problem statement asked for the implementation of a value iteration agent which runs a specified number of iterations to assign values to each state. It updates all the states in each iteration and at the end of the iteration, we have a value for each state. |

**Analysis & Explanation:**

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**Interesting Findings:**

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**Challenges:**

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**Behavior of code for different hyper parameters:**

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**Question 2**

**Introduction:**

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| The problem statement asked for assigning appropriate values of discount and noise that would allow an agent to cross a bridge safely, while avoiding the fire on either side. |

**Analysis & Explanation:**

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**Interesting Findings:**

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**Challenges:**

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**Behavior of code for different hyper parameters:**

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**Question 3**

**Introduction:**

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| The problem statement asked for assigning appropriate values of living reward, discount and noise that would allow an agent to get to the specified goal (either one of the two) using a specified path (either the safe long path or short riskier path). |

**Analysis & Explanation:**

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**Interesting Findings:**

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**Challenges:**

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**Behavior of code for different hyper parameters:**

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**Question 4**

**Introduction:**

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| The problem statement asked for modification of the solution to the first problem by updating one state per iteration as opposed to updating all states in each iteration. The question instructs to ignore terminal state and update state in the order provided by getStates() function. |

**Analysis & Explanation:**

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| The solution was provided by our lab instructor. This |

**Interesting Findings:**

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**Challenges:**

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**Behavior of code for different hyper parameters:**

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**Question 5**

**Introduction:**

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| The problem statement asked for assigning appropriate values of discount and noise that would allow the agent to cross a bridge while avoiding the fire on either side. |

**Analysis & Explanation:**

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**Interesting Findings:**

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**Challenges:**

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**Behavior of code for different hyper parameters:**

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