# Fall 2023 CS5368 Intelligent Systems Project 3 Report

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| First Name | |
| Last Name | |
| Student ID | |

Please answer the following questions and submit them through Blackboard. Be sure to submit it to Project 3 report submission. DO NOT write the report by hand and submit a scanned version. Just write the answers in a Word document and submit it. Both Word and PDF submissions are accepted.

**Basic Questions:**

1. For Question 1, you implemented valueIteration that takes an MDP on construction and runs value iteration for the specified number of iterations before the constructor returns. To do so, you implemented value, Q-value, and policy calculation. Write your strategies for implementing each of those. You may take pictures of equations from slides and use them in your answer.
2. What value did you change for Question 2? And what did you change it to? Explain.
3. What values did you change for Question 3 (a through e)? And what did you change them to? Explain.
4. What is your implementation strategy for Question 4 (Q-learning)? Explain.
5. What is your implementation strategy for Question 5 (Epsilon Greedy)? Explain.
6. What values did you change for Question 6? And what did you change them to? Explain.
7. What did you do for Question 7?
8. Run

   python pacman.py -p PacmanQAgent -n 10 -l smallGrid -a numTraining=10

   using your code and report on what is happening? is Pacman failing or wining? What is your "Average Score" and your "Win rate"? Justify
9. What is What is your implementation strategy for Question 9? Explain.