## Artificial Intelligence Course

## Project 1: Search in Pacman

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### Comments about the assignment (if you have)

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### Question 1: Finding a Fixed Food Dot using Depth First Search (3 points)

### Meta is dictionary structure which holds route from starting point to the current point

### Stack holds information about neighbor nodes and organizes queueing by the LIFO procedure

### Ban is list which holds nodes that have already being explored and makes sure we don’t check nodes twice

### Question 2: Breadth First Search (3 points)

### Same data structures as in Q1 but instead of using stack which is First In Last Out we use Queue data structure which is First in First Out data structure.

### Question 3: Varying the Cost Function (3 points)

### Now instead of Queue we use data structure called priority queue which organizes items in it to have to lowest priority at the top of the queue. This makes it possible to calculate nodes based on cost

### Question 4: A\* search (3 points)

### Same as Q3 but now we input into the Priority Queue sum of cost and value for heuristic

### ~~Question 5: Finding All the Corners (3 points)~~

### ~~Explain the new state representation….~~

### ~~Question 6: Corners Problem: Heuristic (3 points)~~

### ~~Explain your Heuristic function …~~

### ~~Question 7: Eating All The Dots (4 points)~~

### ~~Explain your new state representation and the heuristic function…~~

### ~~Question 8: Suboptimal Search (3 points)~~

### ~~Explain how did you do the suboptimal search …~~