Artificial Intelligence

Assignment no. 1

1. What is an intelligent agent? Describe various type of agent environments with examples.
2. What is meant by admissible heuristic? What improvement is done in A\* search than greedy search? Prove that A\* search gives us optimal solution if the heuristic function is admissible.
3. What is an intelligent agent? Briefly describe the type of agents with examples.
4. Write a python program to solve 8 puzzle problem with the algorithm of your choice and explain why did you choose the algorithm?
5. Design an Artificial Intelligent System with
   1. The problem you want to solve with its environment
   2. PEAS description of your agent
   3. Description of search space
   4. Description of the knowledge required and to used
   5. Description on how you would plan to implement the system.

Note: Code not required

Recommendations:

* It should be the student’s own work – plagiarism is unacceptable.
* Clarity of expression and structure are important features.
* Your work should be submitted as a well presented, word-processed document with headers and footers, and headings and subheadings.
* You are expected to undertake research on this subject using books from the Library, and resources available on the Internet.
* Any sources of information should be listed as references at the end of your document and these sources should be referenced within the text of your document using APA referencing style
* All assignments must be typed in Times New Roman, size 12, 1½ spacing.