CSE643: Artificial Intelligence

Assignment-5

Due date: 23-Nov-2021 11:59PM **Marks: 7**

1. You have to build a small natural language interface in Python that will provide inputs to your electives advisory system developed in Prolog. Make it effective and interesting, but keep it simple.
2. For example, in the sample Prolog program that I have written for a Travel advisory system (see try10.pl), the Prolog program asks inputs from the user when the Type of place that the person wants to visit is not specified (from adventure, hills, and heritage). Hence for that input, I have written an extremely trivial Python program that takes the user input and does tokenization, then finds root words, and then checks if the words 'interest' and 'adventure' are specified. If these are specified then the Python program creates a Prolog file with the fact 'interest_in(adventure).". Now this file is consulted in the Prolog file 'try10.pl' {thru 'suggest(Place, Type, 10000, 20, Age)'} and the fact specified in the file is read. This becomes one of the clauses in the prolog program during runtime. Then based on that fact the prolog program does not ask the user any further questions and is able to suggest Places to visit (given a budget and time). *NOTE: this is just a sample and you do not have to build your program like this.*
3. For your electives advisory system you can create such a simple interface. Of course, if you want you can make it more complex with PoS tagging and then based on the Nouns, Verbs, etc. you can create facts for the Prolog program to work on.
4. You are required to submit in a zip file consisting of your code (.py file) along with the screen shots in a report. Name the ZIP file as: AI-A5-<Name>-<RollNo>.
5. Demonstrate the program to your assigned TAs.