## Task4: Report

1) Write and submit a report describing your system. Be sure to include your knowledge base description in plain English. Provide suitable justifications and examples wherever necessary. Additionally, also report your tool's performance on some questions that you have used to test your system.

Note: MY ALL THE PLAIN ENGLISH LANGUAGE KNOWLEDGE BASE INCLUDES IN THE FILE NAME: task1 and task2 separately.

- In my system I have made the use of prolog system to prove my system.
- Firstly, I have thought about that how to be questioned to be asked.
- Then I have made the functions according to that and make the axioms on a particular basis of solving the problem items.
- Honestly, I have thought the hole axioms on the backtracking process.
- It will make me ease to thought of new axioms.
- EXAMPLE:- Suppose we have to find that "what does the John carry to the home?"

Then the answers will be that "what John did buy from the store?" and

"Did he bring the money with him? "

Therefore, Axioms should be like this:

**Carry(john,X):- buys(john,X), bring(john,money).** [X is variable.]

In this axioms if the buys(john,cheesecake) and bring(john,money) both are **TRUE** then only carry(john,cheesecake) axioms return the answer true.

- **ISSUE:** I have faced some of the issue the if I have not listed any items in the list of database then it shows me the error in the output.
- Then I have written all the general formulas for the some axioms which should I have to interested into answers.

• EXAMPLE: Suppose we must have to find that" what are items bought by the john from the store?"

Then if we use this axiom with the variable. **buys(john,X).** 

**output :** It will return you all items which are bought by the john. After each answer you have to press ":" for the next item.

For example, If you get the answer of meat then press ";" for the next particular answers in the list.

- Tools performance is very bad on the firstly made axioms which are only on atomic. It shows me the errors in each axiom.
- Then I generalize the tool and learnt from the errors. Now it is completely work fine with all the axioms which I have define.
- In Some negative question I got some error first because of I was using the wrong system method. But I got my mistakes it will shows me the perfect answer for the negative question.
- Example:

Onion are not made in jasonsdeli.

So I have made only madein(X). axiom

If you want to include negative, then you have to put "-" Infront of the variable. So in the prolog file you have to ask the question like this madein(-onions).

2)PROLOG FILE: a3.pl output of task1 and task2 is in "task1 and task2 file"

3) FIND: README FILE