- 1. WAP in prolog to find the addition of two input numbers by asking value from user.
- 2. WAP in prolog to find the average of three input numbers.
- 3. WAP in prolog to compare two input numbers.
- 4. WAP in prolog to find the factorial of an input number using recursion.
- 5. WAP in prolog to find the Fibonacci of a given number using recursion.
- 6. WAP in prolog to display numbers from 1 to 10.
- 7. WAP in prolog to find the sum of numbers from 1 to 20.
- 8. Given the following statements

Gold is valuable.

Sita is female.

Sita owns gold.

Ram is father of hari.

Ram gives book to hari.

Represent the above statements in the form of facts and answer the following question by running query on prolog.

Questions:

- a) Is hari is father of sita?
- b) Who is father of hari?
- c) Who give book to whom?
- d) Who owns gold?
- e) Is salt valuable?

(Please do extra 2 Ouestions that will represent facts and answer the question)

- 9. By considering your family tree construct facts about male, female and parent (e.g. male(ram), female(sita), parent(ram,hari)). Construct a rule for father, mother, grandfather, brother and sister. After that write queries to test different relation.
- 10. Create a medical diagnosis expert system in prolog by gathering data about symptoms of disease and medicine prescribed for that. The expert system can identify which disease has occurred to the person and also suggest some medicine when particular disease is detected. (please add at least 6 disease and Symptoms)
- 11. WAP in prolog to implement Map coloring problem as a constraint satisfaction problem.
- 12. WAP in prolog to implement BFS searching.
- 13. WAP in prolog to implement DFS searching.
- 14. WAP in prolog to implement TSP problem.
- 15. WAP in prolog to implement Tower of Hanoi problem.
- 16. WAP to implement GA in any programming language.
- 17. WAP to implement Simple NN in any programming language.