Course Outcomes	
CO1	Assess critically the techniques presented and to apply them to real world problems (Analyze)
CO2	Mindful of the significant difficulties confronting AI and the multifaceted nature of run of the mill issues inside the field(remember)
CO3	Comprehend the significant zones and difficulties of AI (Understanding)
CO4	Apply fundamental AI calculations to take care of issues(Apply)
CO5	Get a learning of utilizations in various zones of registering including the web and human communication(Evaluate)

Lab	Program	CO
1.	Write a prolog Program to understand the concept of facts and queries.	
2.	Write a prolog program to implement the following: a. Factorial of a given number b. Fibonacci of a given number	
3.	Write a program to implement Tic-Tac-Toe game problem.	
4.	Write a program to implement BFS.(for 8 puzzle problem or Water Jug problem or any AI search problem)	
5.	Write a program to implement DFS.(for 8 puzzle problem or Water Jug problem or any AI search problem)	
6.	Write a program to implement Single Player Game .(Using Heuristic Function)	
7.	Write a prolog program to perform the following operations of list: i. To display the element of give list ii. To check given element is in the list or not iii. To print the last element of the list iv. To print the sum of the elements of the given list	
8.	Implement a Family Tree and define the following predicates: i. parent(X,Y) ii. father(X,Y) iii. mother(X,Y) iv. sister(X,Y) v. brother(X,Y) vi. grandfather(X,Y)	

	vii. grandmother(X,Y)	
9.	Assume given a set of facts of the form father(name1,name2) (name1 is the father of name2) Define a predicate cousin(X,Y) which holds iff X and Y are cousins. Define a predicate grandson(X,Y) which holds iff X is a grandson of Y. Define a predicate descendent(X,Y) which holds iff X is a descendent of Y. Define a predicate grandparent(X,Y) which holds iff X is a grandparent of Y. Consider the following genealogical tree: father(a,b). father(a,c). father(b,d). father(b,e). father(c,f). Say which answers, and in which order, are generated by your definitions for the following queries in Prolog: ?- cousin(X,Y). ?- grandson(X,Y). ?- descendent(X,Y). ?-grandparent(X,Y).	
10.	Write a program to solve Tower of Hanoi problem using Prolog.	
11.	Write a program to Implement A* Algorithm using Prolog.	
12.	Write a program to solve N-Queens problem using Prolog.	
13.	Write a program to solve travelling salesman problem using Prolog.	
14.	Write a program to solve Monkey Banana problem using Prolog.	

Software Required
• SWI-Prolog • Visual Prolog • GNU Prolog • YAP Prolog

Head – Computer Engineering