

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY
DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH
DEPARTMENT OF INFORMATION TECHNOLOGY
ACADEMIC YEAR: 2022-23

List of Experiments

Name of Sub. Co Ordinator : Parth Singh

Date: 05/07/2022

Subject: ARTIFICIAL INTELLIGENCE (CS341) (5th Sem)

Exp. No	Name of Experiment	No. of Lab Hours	CO
1.	Write Programs to demonstrate knowledge of Python Basics.	4	2
	1.1 Write a program to demonstrate variable creation in python		
	1.2 Write a program to demonstrate command input in python		
	1.3 Write a program to demonstrate numbers and strings in python		
	1.4 Write a program to demonstrate operators in python		
	1.5 Write a program to demonstrate decision making in python		
	1.6 Write a program to demonstrate control structures in python		
	1.7 Write a program to demonstrate lists and dictionary in python		
2.	Write a program to solve Tower of Hanoi problem in python.	2	2
3.	Write a program to solve Monkey Banana problem in Prolog	2	2
4.	Write Programs to demonstrate knowledge of Prolog Basics.	4	1
	4.1 Write a program in prolog to implement simple facts and Queries.		
	4.2 Write a program in prolog to implement phone list which stores name, phone number and birthdays of friends and family members. Write a query to get a list of people whose birthdays are in the current month.		
	4.3 Write predicates one converts centigrade temperatures to Fahrenheit, the other checks if a temperature is below freezing.		
5.	Write Programs to demonstrate knowledge of arithmetic operators in prolog	2	6
	5.1 Write a program to display Fibonacci series in prolog		
	5.2 Write a program to find factorial of a number in prolog		
6.	Write a prolog program for medical diagnosis system of childhood diseases.	2	6
7.	Write a program which contains three predicates: male, female, parent. Make rules for following family relations: father, mother, grandfather, grandmother, brother, sister, uncle, aunt, nephew and niece, cousin.	2	
8.	Write a program to perform following operations on lists in prolog.	2	4
	8.1 Print member of a list		
	8.2 Write list		
	8.3 Membership		
	8.4 Concatenation		
	8.5 Add an item		
	8.6 Delete an item		
	8.7 Sub list		
	8.8 Permutations		
	8.9 Append list		
	8.10 Finding nth element		
9.	Write a program to demonstrate cut and fail in prolog.	2	4
10.	Design Depth First Search Tree and Breadth First Search Tree for Water-Jug Problem in python	2	4
11.	Write a program to solve 8 puzzle problem using A*Algorithm in python	2	6
12.	Write a program for game Tic-Tac-Toe using MINIMAX Algorithm in python.	2	1
13.	Perform classification on Iris dataset using neural network tools such as WEKA, ORANGE, NEUROINTELLIGENCE, EasyNN.	2	1
14.	Perform sentiment analysis of movie reviews using nltk in python	2	2