ARTIFICIAL INTELLIGENCE LABORATORY-II

Lab Manual

Academic Year : 2022 - 2023
Course Code : 20AM3603
Semester : VI
Department : CSE (AIML)

NAME: ……

USN: ……

Semester: ……

Section: ……

Dayananda Sagar University,

Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka 560068

Laboratory Certificate

This is to certify that Mr./Ms. .... bearing University Seat Number (USN) _____ has satisfactorily completed the experiments in above practical subject prescribed by the University for the_____ semester B.Tech in the **ARTIFICIAL INTELLIGENCE -II(20AM3603)** Laboratory of this university during the year 2022-2023.

Date: Signature of Faculty

MARKS	
Maximum	Obtained

Instructions for Laboratory Exercises

1. The programs with comments are listed for your reference. Write the programs in observation book.
2. Create your own subdirectory in the computer. Edit (type) the programs with program number and place them in your subdirectory.
3. Execute the programs as per the steps discussed earlier and note the results in your observation book
4. Initially you will start with PYTHON & ANACONDS tools, execute the program.
5. You can also use Google clab, jyupter notebook for execution of the program.
6. Please include program output screen for every program.

COURSE OBJECTIVES:

- To provide skills for designing and analyzing AI-based algorithms.
- To familiarize students with skills to work in various sub-areas of AI, such as expert systems, natural language processing, and machine learning.

COURSE OUTCOMES:

CO No.	Outcomes	Bloom's TaxonomyLevel
1	Demonstrate awareness and a fundamental understanding of applying AI techniques in intelligent agents, expert systems, artificial neural networks and other machine learning models.	L6
2	Select and apply appropriate algorithms and AI techniques to solve complex problems.	L6

List of Laboratory/Practical Experiments activities to be conducted:

#	Name of the Experiment	Date of Conduction	Marks (CIE)	Signature
1	Design & analyze the application of Artificial Intelligence for Graph Theory concept.			
2	For a given set of training data examples stored in a .CSV file, implement and demonstrate the Candidate-Elimination algorithm to output a description of the set of all hypotheses consistent.			
3	Write a python program to remove punctuations from the given string?			
4	Implement naïve bayes theorem to classify the English text			
5	Implement the finite words classification system using backpropagation algorithm			
6	To implement the model to correctly identify the sentiments of the users by reviews which is an English paragraph and the result will be in positive or			

	negative only. “NLP - Sentiment Analysis - Restaurant Reviews”.			
7	Deep Learning:			
8	Handwritten recognition using MNSIT			
9	IOT + AI:			
10	MINI Project (Graph Theory / Prolog /LISP / CNN /NLP) Each batch (Consisting of not more than 3 members need to submit the mini project report & demonstration on the said topics)			

Final Submission Date: Signature of Faculty

Lab1:

Objective: Design & analyze the application of Artificial Intelligence for Graph Theory concept.

Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab2:

Objective: For a given set of training data examples stored in a .CSV file, implement and demonstrate the Candidate-Elimination algorithm to output a description of the set of all hypotheses consistent.

Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab3:

Objective: Write a python program to remove punctuations from the given string?

Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab4:

Objective: Implement naïve bayes theorem to classify the English text
Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab5:

Objective: Implement the finite words classification system using backpropagation algorithm

Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab6:

Objective: To implement the model to correctly identify the sentiments of the users by reviews which is an English paragraph and the result will be in positive or negative only. “NLP - Sentiment Analysis - Restaurant Reviews”.

Explanation:

Program Code:

Program Code:

Program Code:

Output lab1

Lab7

Objective:

Lab8

Objective:

Lab9

Objective: